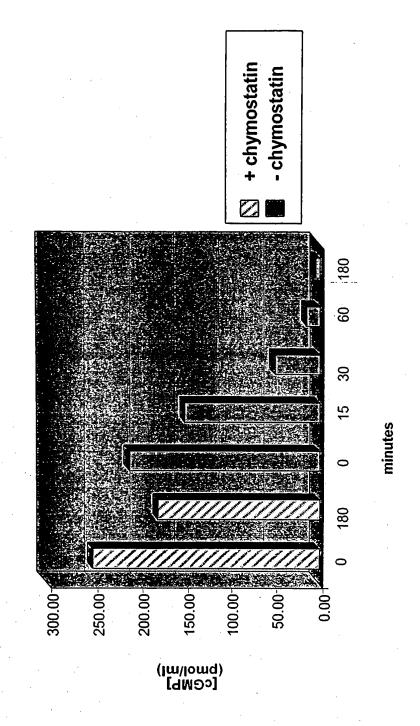
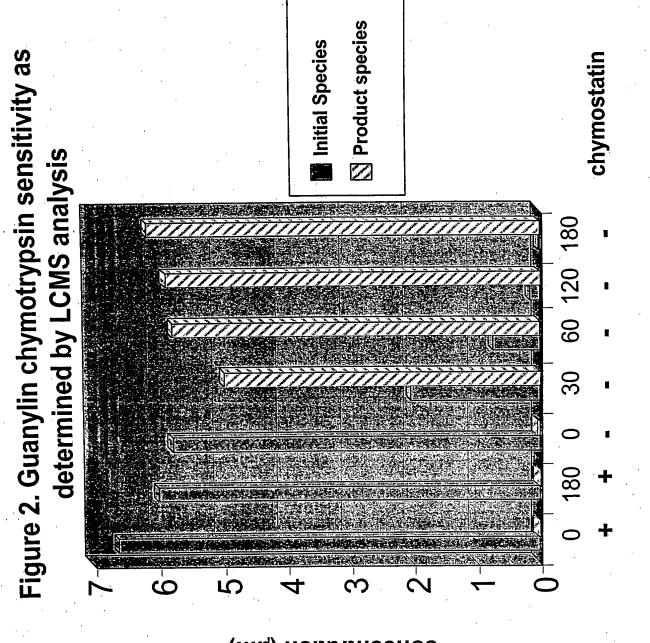
Figure 1. Guanylin chymotrypsin sensitivity as determined by cGMP assay





concentration (µm)

PCT/US2005/002941

```
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
Human Guanylin (SEQ ID NO: )
                                                                 (SEQ ID NO:
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
--- --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
--- --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
--- --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
--- --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
--- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
--- --- Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
--- --- Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
--- --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
--- --- Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
--- Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
--- --- Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                (SEQ ID NO:
--- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
--- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
--- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys Thr Gly Cys
--- Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
                                                                                )
--- --- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
                                                                                )
--- --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
--- --- Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
```

FIG. 3 (sheet 1 of 17)

--- --- Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO: --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys (SEQ ID NO: (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys --- --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO: (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- --- Cys (SEQ ID NO: --- --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys --- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly --- Cys --- -- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys --- Gly --- Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly --- Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly --- Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly --- Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys --- Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys (SEQ ID NO: --- Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys --- Gly --- Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly --- Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys --- Gly --- Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys --- Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys) (SEQ ID NO: --- Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys --- Gly --- Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys) (SEQ ID NO: --- Gly --- Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys --- Gly --- Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO: --- Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys) (SEQ ID NO:) (SEQ ID NO: --- Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys --- Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO: --- Gly --- Cys Gly Glu Ile Cys --- --- Ala Ala Cys Thr Gly Cys) (SEQ ID NO: --- Gly --- Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys --- Gly --- Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO:) --- Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO: --- Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys) (SEQ ID NO:) --- Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys (SEQ ID NO: (SEQ ID NO:) --- Gly --- Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys) (SEQ ID NO: --- Gly --- Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys

FIG. 3 (sheet 2 of 17)

```
--- Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Cys
--- Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- -- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- -- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
```

FIG. 3 (sheet 3 of 17)

```
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
--- Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
--- Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
--- Gly Thr Cys Gly --- --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys Gly --- --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys Gly --- --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys Gly --- Ile Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
                                                                                 )
--- Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
--- Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys --- Gly Cys
--- Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
                                                                   (SEQ ID NO:
                                                                                  )
--- Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
--- Gly Thr Cys Gly Glu --- Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly Glu --- Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly Glu --- Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                   (SEQ ID NO:
                                                                                  )
                                                                                  )
--- Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
                                                                                  )
--- Gly Thr Cys Gly Glu --- Cys Ala --- Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
                                                                                  )
--- Gly Thr Cys Gly Glu --- Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                   (SEQ ID NO:
                                                                                  )
                                                                   (SEQ ID NO:
--- Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                                  )
--- Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                   (SEQ ID NO:
                                                                   (SEQ ID NO:
                                                                                  )
--- Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
                                                                                  )
 --- Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Cys Thr Gly Cys
                                                                                  )
 --- Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                   (SEQ ID NO:
                                                                   (SEQ ID NO:
 --- Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr --- Cys
```

FIG. 3 (sheet 4 of 17)

--- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys --- Gly Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr --- Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- -- Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu Ile Cys --- Ala Ala Cys Thr Gly Cys (SEQ ID NO: --- Gly Thr Cys Gly Glu Ile Cys --- --- Ala Cys Thr Gly Cys (SEQ ID NO:

--- Gly Thr Cys Gly Glu Ile Cys --- --- Ala --- Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys Thr --- Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO:
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Cys Thr Gly Cys (SEQ ID NO:
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys --- Gly Cys (SEQ ID NO:
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr --- Cys (SEQ ID NO:

--- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr --- Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- --- Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys --- Gly Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr --- Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys --- Gly Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- --- Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys (SEQ ID NO:)

--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO:)
--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Cys (SEQ ID NO:)

(SEQ ID NO:

)

--- Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys

FIG. 3 (sheet 5 of 17)

```
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                              (SEQ ID NO:
Pro --- Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                              (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
                                                               (SEQ ID NO:
Pro --- Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
Pro --- Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys --- Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
                                                                             )
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
Pro --- -- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                               (SEQ ID NO:
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                               (SEQ ID NO:
                                                                             )
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                               (SEQ ID NO:
                                                                             )
Pro --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                              (SEQ ID NO:
```

FIG. 3 (sheet 6 of 17)

```
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys --- --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                 (SEQ ID NO:
Pro --- Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
Pro --- Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys --- Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- -- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- -- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly --- Ile Cys --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
```

FIG. 3 (sheet 7 of 17)

```
Pro --- Thr Cys Gly --- Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala --- Ala --- Cys Thr Gly Cys
Pro --- Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu --- Cys --- Tyr --- Ala Cys Thr Gly Cys
Pro --- Thr Cys Gly Glu --- Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
Pro --- Thr Cys Gly Glu --- Cys Ala --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr --- Cys
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys --- Gly Cys
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                                 )
Pro --- Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu Ile Cys --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu Ile Cys --- -- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro --- Thr Cys Gly Glu Ile Cys --- -- Ala Ala Cys Thr --- Cys
                                                                                 )
                                                                  (SEQ ID NO:
```

FIG. 3 (sheet 8 of 17)

```
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr --- --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro --- Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- -- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys --- --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys --- --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys --- Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                (SEQ ID NO:
```

FIG. 3 (sheet 9 of 17)

```
(SEQ ID NO:
Pro Gly --- Cys --- Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
Pro Gly --- Cys --- Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
Pro Gly --- Cys --- Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
Pro Gly --- Cys --- Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                                 )
Pro Gly --- Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                                 )
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Cys
                                                                                 )
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly --- --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly --- --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
Pro Gly --- Cys Gly --- Ile Cys --- -- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
Pro Gly --- Cys Gly --- Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
Pro Gly --- Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                                 )
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                                 )
Pro Gly --- Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                                 )
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
```

FIG. 3 (sheet 10 of 17)

```
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly --- Cys Gly Glu Ile Cys --- -- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- -- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- -- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Cys
                                                                  (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                                )
                                                                  (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
```

FIG. 3 (sheet 11 of 17)

```
Pro Gly --- Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala --- --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala --- --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- -- Cys
                                                                                )
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- -- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro Gly --- Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys --- -- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- -- Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- -- Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
```

FIG. 3 (sheet 12 of 17)

```
Pro Gly Thr Cys --- -- Ile Cys Ala Tyr --- Ala Cys Thr --- Cys (SEQ ID NO:
Pro Gly Thr Cys --- -- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- -- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- -- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- -- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala --- Cys Thr .--- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys --- Glu Ile Cys Ala --- -- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
```

FIG. 3 (sheet 13 of 17)

```
Pro Gly Thr Cys --- Glu Ile Cys Ala --- --- Cys ThreGlyeCys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala Cys --- Gly Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala Cys Thr --- Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala --- Cys --- Gly Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala --- Cys Thr --- Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys --- Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                   (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys --- Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                  (SEQ ID NO:
 Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys --- Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly Thr Cys Gly --- --- Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly Thr Cys Gly --- --- Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
                                                                                 )
Pro Gly Thr Cys Gly --- --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly --- --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
```

FIG. 3 (sheet 14 of 17)

Pro Gly Thr Cys Gly --- Ile Cys --- Ala Ala Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- --- Ala Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- --- Ala --- Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Ala Ala Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- --- Ala Ala Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr --- Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr --- Ala Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr --- Ala Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala --- Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala --- Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys --- Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys --- Tyr Ala Ala Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- --- Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala --- -- Ala Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- -- Ala Cys Thr --- Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala --- Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala --- Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala --- Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala --- Ala Ala Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys --- Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr --- Ala Cys Thr --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys --- Gly Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys --- Cys (SEQ ID NO: Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala --- Cys Thr --- Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys --- Cys (SEQ ID NO:) Pro Gly Thr Cys Gly --- Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys --- --- Ala Ala Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys --- --- Ala Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys --- --- Ala --- Cys Thr Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys --- Ala Ala Cys --- Gly Cys (SEQ ID NO:) Pro Gly Thr Cys Gly Glu --- Cys --- --- Ala Ala Cys Thr --- Cys (SEQ ID NO:)

FIG. 3 (sheet 15 of 17)

```
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr --- Ala Cys Thr --- Cys
                                                                  (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- -- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu --- Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys --- -- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu --- Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- -- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys --- -- Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys --- Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys --- --- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                               )
```

FIG. 3 (sheet 16 of 17)

```
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys --- Gly Cys
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys --- Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala --- Cys Thr --- Cys
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys --- Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys --- --- Cys
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- Gly Cys
                                                                                )
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys --- --- Cys
Pro Gly Thr Cys Gly Glu Ile Cys Ala --- Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- --- Cys
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr --- Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys --- --- Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala --- Cys Thr --- Cys
                                                                 (SEQ ID NO:
                                                                                )
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- Gly Cys
                                                                 (SEQ ID NO:
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys --- --- Cys
                                                                 (SEQ ID NO:
                                                                                )
Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr --- Cys
                                                                 (SEQ ID NO:
```

FIG. 3 (sheet 17 of 17)

SEQID NO: SEQID NO: SEQID NO SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO (SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO SEQID NO SEQID NO SEQID NO. SEQID NO: SEQID NO Cys CysCys CysCys CysCys Cys Tyr Xaa' Ala Ala Cys Thr Gly Cys Cys Thr Gly Cys Cys Xaa' Thr Gly Cys Cys CysCys CysCys Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Cys Gly Cys Xaa' G1yTyr Ala Xaa' Ala Cys Thr Gly Tyr Ala Ala Cys Thr Xaa' Gly Cys Thr Gly Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly $_{
m Gly}$ Tyr Ala Xaa' Ala Cys Thr Gly Tyr Ala Ala Xaa' Cys Thr Gly G1vCys Thr Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Cys Thr Xaa' $_{\rm GLy}$ Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Cys Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Ala Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Ala Tyr Ala Ala Ala Xaa' Tyr Ala Ala Ala Ala Xaa' Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Glu Xaa' Ile Cys Ala Tyr Ala Ala Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Ala Tyr Ala Ala Cys Ala Xaa' Tyr Ala Ala Tyr Xaa' Ala Ala Cys Tyr Ala Ala Cys Tyr Ala Ala Cys Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Cys Ala Tyr Ala Tyr Ala Ala Tyr Ala Ala Ala Ala Tyr Ala Ala Ala Tyr Ala Ala Tyr. Xaa' Glu Ile Cys Ala Tyr TyrXaa' Gly Glu Ile Cys Ala Ala ' Ala Ala Ala Cys 7 Cys Cys Cys Cys Cys Cys Ile Glu Ile Ile Πe Ile Ile Ile Ile I]e Ile Ile Glu Ile Ile Glu Ile Glu Ile Glu Glu Glu Glu Glu Glu Glu GluGlu Glu Glu GlyGLy $_{
m GLy}$ GlyGlyGly \mathtt{Gly} GLy $_{
m GLy}$ GLyCys Gly GlyGly GlyGLy $_{
m GLy}$ ${\tt Gly}$ GLyGLyGly GlyCys Cys Xaa' Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa Xaa' Thr Xaa' Xaa' Xaa Xaa ' Xaa' Xaa' Xaa 1 Xaa ' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa 1 Xaa 1 Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr ${
m Th} x$ Thr Xaa Xaa Xaa 1 Xaa ' Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa ' Xaa' Xaa, Xaa' Xaa 1 Xaa, Xaa' Xaa' Xaa' Xaa' Xaa' Thr Xaa' Xaa' Xaa' Xaa Xaa, Xaa' Xaa' Xaa' Xaa Xaa1 Xaa Xaa Gly Xaa' Xaa' Gly Xaa' Xaa' Xaa' Xaa' Gly Xaa' Xaa Xaa Xaa' Xaa' Xaa' Gly Xaa' Xaa' GLyGIV Gly Gly G1yGly $_{\rm Gly}$ Gly Gly GLyGLyGlyG1yG1yGLyGLyGLyPro Pro Pro

SEQID NO SEQID NO: SEOID NO SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO SEQID NO SEOID NO SEQID NO SEQID NO SEQID NO SEQID NO SEQID NO SEOID NO SEQID NO SEQID NO SEQID NO SEQID NO SEOID NO SEQID NO Cys CysCys CysCys Cys Cys Xaa' Cys Cys Cys CysCys Cys Cys Cys Xaa1 Gly GLyGLyThr Gly Xaa' G1yGIV Thr Gly Thr Gly Xaa' Cys. Thr Gly Cys Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys ThrThr Xaa' Thr Thr Ala Ala Cys Thr Xaa' Thr Cys Thr Gly Cys Cys Cys Cys Cys Xaa' Ile Cys Ala Tyr Ala Ala Cys Cys Xaa' Thr Ala Ala Ala Xaa' Ala Xaa' Glu Ile Cys Ala Tyr Ala Ala Ala Ala Xaa' Ala Ala Ala Ala Ala Ala Ala Xaa' Xaa' Ala Tyr Ala Ala Tyr Ala Ala Xaa' Ala Ala Ala Xaa' Ala Xaa' Ile Cys Ala Tyr Ala Ala Tyr Xaa' Ala Ala Ala Cys Tyr Ala Ala Xaa' Cys Cys Cys Ala Ala Cys Ala Cys Ala Ala Cys Ala Tyr Ala Xaa' Ala Tyr Ala Tyr Ala Xaa' Ala Ala Ala Ala Ala Ala Tyr Ala Ala Ala Tyr Ala Ala Tyr Cys Ala Tyr Ala Ala Ala Ala Ala Xaa' Gly Glu Ile Cys Ala Ala Ala Xaa' Tyr Tyr Tyr Tyr Tyr TyrCys Ala Ala Ala Ala Ala Ala Ala Ala Xaa' Xaa Cys Cys Cys Cys Cys Ċys Cys Cys Cys Cys Cys Cys Cys Cys Glu I1eIleIle IleI1eIle I]e Ile Ile Ile IleIle Ile Ile G]u Glu GLuGlu GluGlu GluGlu Glu Xaa' Xaa' Xaa' Xaa' GLyGly $_{
m GLy}$ Gly ${\tt Gly}$ GlyG1yXaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa 1 Xaa' Xaa ' Xaa' Xaa ' Xaa' Xaa' Xaa ' Xaa Xaa' Xaa' \mathtt{Gly} GlyG1vGIVG1yG1vGly Cys Cys Cys Cys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa' Xaa' Xaa' Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa Xaa Xaa 1 Xaa' Xaa Xaa1 Xaa1 Xaa' Gly Xaa' Xaa Xaa Xaa, Xaa' Xaa Xaa' Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa, Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa, GLyGly GlyG1yGlyGLyGlyG1yGIV \mathtt{GLy} G1yGlyGLyGlyGly GLyGLyGlyGlyGlyGly Gly Pro Pro

(sheet 2 of 114)

SEQID NO: SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: CysCysCys Cys Xaa' Cys CysCysCysCysCys Cys CysCys Cys Cys Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Xaa' Ala Tyr Ala Ala Cys Thr Gly Gly Ala Ala Cys Xaa' Thr Gly Gly Xaa' Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys Thr Xaa' Gly Xaa' Tyr Ala Ala Cys Thr Gly Tyr Ala Ala Xaa' Cys Thr Gly Cys Cys Cys Thr Gly Cys Tyr Ala Ala Cys Thr Ala Ala Cys Xaa' Thr Tyr Ala Ala Cys Thr Tyr Xaa' Ala Ala Cys Thr Tyr Ala Xaa' Ala Cys Thr Xaa' $_{
m GLY}$ Gly GLyTyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Thr Gly Cys Cys Thr Thr Cys Thr Ala Xaa' Ala Ala Xaa' Ala Tyr Ala Ala Tyr Ala Ala Xaa' Tyr Ala Xaa' Ala Ala Ala Xaa' Cys Ala Ala Cys Cys Xaa' Ala Ala Ala Ala Ala Tyr Ala Ala Tyr Ala Ala Ala Tyr Ala Ala Tyr Ala Ala Ala Ala Tyr Ala Ala Tyr Ala Ala Ala Tyr Ala Xaa' Xaa $\mathrm{T}\mathrm{yr}$ TYYTyrTyrAla Ala Ala Cys Ala Xaa' Xaa' Xaa, Xaa Xaa 1 Xaa' Ala Xaa' Xaa' Cys Cys Cys Xaa' Xaa' Xaa' Xaa' Xaa 1 Xaa' Xaaı Cys Xaa' Cys Xaa' Xaa' Ala Ala Ile Ile Ile Xaa Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa Xaa' Xaaı Xaa' Cys Cys Cys Cys Cys Cys Cys Cys Ile Ile Ile Ile TTe Ile I1eIleIle Ile Ile Ile Ile Glu Glu Glu Glu GluGlu Glu Glu Glu Glu Glu Glu Glu $_{\rm Glu}$ Glu Glu Glu GluGlu GlyG1yG1yGly Gly G1V ${\tt Gly}$ G1yGLyG1yGlyGly GLyCys Cys Cys Ċys Cys Cys Cys Cys Cys Cys Cys \mathtt{Thr} Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa' Xaa' Xaa ' Xaa' Xaa' Xaa¹ Xaa' Xaa' Xaa Xaa' Xaa 1 Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa1 Xaa' Xaa Xaa' Xaa Xaa' Xaa Xaa Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa Xaa Xaa Xaa GLyGly GLYGly GlyG1yG1yG1yGLy \mathtt{Gly} GlyGLy $_{\rm GLy}$ $_{
m GLy}$ \mathtt{Gly} Gly ${\tt GLy}$ GlyG1yGlyGlyPro Pro Pro

(sheet 3 of 114)

FIG. 4 (sheet 4 of 114)

(SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO SEQID NO SEQID NO SEQID NO SEQID NO (SEQID NO (SEQID NO (SEQID NO SEQID NO. SEQID NO: SEQID NO: SEQID NO: SEQID NO SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: CysCys Cys CysCys Cys Cys CysCys Cys Cys Cys CysCysCys CysCys Cys Cys Thr Gly Cys Xaa' Xaa' Xaa' Thr Gly Cys Xaa' Cys Xaa' Cys Xaa' Gly Xaa' Ala Cys Thr Gly Xaa' Cys Thr Gly Gly GIV Cys Xaa' Xaa' Thr Gly GlyXaa' GIV Ala Cys Thr Gly Xaa' Thr Gly Xaa' Gly Xaa' Xaa' Xaa' Gly Thr Gly Cys Ala Xaa' Cys Thr Cys Xaa' Thr Thr Xaa' Xaa' Thr Thr Xaa' Xaa' $_{
m GLy}$ Gly GLy ${\tt Gly}$ Thr Gly Cys Thr Thr Thr Ala Ala Cys Thr Thr Ala Ala Cys Xaa' Thr Xaa' Thr Xaa, Xaa' Xaa ' G1yGlyG1yCys Cys Cys Cys Cys Cys Ala Ala Xaa' Cys Xaa' Xaa' Thr \mathtt{Thr} Thr Thr $\operatorname{Th} r$ Ala Ala Ala Xaa' Ala Ala Xaa' Xaa' Xaa, Ala Xaa' Ala Xaa' Cys Cys Cys Cys Cys Ala Ala Ala Ala Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Ala Xaa' Ala Ala Ala Ala Ala Ala Ala Tyr TyrTyr Tyr Tyr Tyr Tyr Tyr $\mathbf{T}\mathbf{y}\mathbf{x}$ TyrAla Ala Ala Ala Ala Cys Cys CysCys Cys Cys Cys Ile Ile I1eIle Ile G]u G]n Glu Glu Glu Glu Glu Glu Glu Glu Glu GLyGly GLyGlyGlyGLyGlyG1yGLy $G_{1}^{1}y$ G1yGlyGlyGlyGly G1yGly GIV Cys Ċys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa1 Xaa Xaa' Xaa Xaa Xaa Xaa' Xaa ' Xaa' Xaa Xaa' Xaaı Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa, Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' \mathtt{Gly} GlyGly GLyGlyGlyGlyGly ${\tt Gly}$ GLY \mathtt{Gly} $_{\rm GLy}$ G1yG1yG1yGlyGlyGlyG1yGlyG1yGLyPro Pro Pro

FIG. 4 (sheet 5 of 114)

(SEQID NO: SEQID NO SEQID NO Cys Cys Cys Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Tyr Ala Ala Cys Thr Gly Xaa' Cys Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Tyr Xaa' Ala Ala Cys Thr Gly Ala Ala Xaa' Cys Thr Gly Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa, Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Tyr Xaa' Ala Ala Cys Thr Gly Tyr Ala Ala Cys Thr Gly Cys Cys Ala Tyr Ala Ala Cys Thr Gly Cys Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa Thr Cys Ala Tyr Ala Ala Cys Cys Tyr Ala Ala Tyr Ala Ala Ala Tyr Ala Ala Ala Cys Ala Xaa' $_{
m Tyr}$ Tyr Ala ' Xaa' Cys Ala Ala Ala Xaa' Cys Ala Cys Ala Cys Ala Cys Ala Cys Ile Xaa' Cys Cys IleIle IleIle Xaa' Ile Ile Ile ∐ 1 Ile IleIle Xaa' Xaa' Xaa, Xaa' Xaa Xaa' Ile Ile Ile Glu Ile Glu Ile Glu Ile Ile Xaa' Glu Glu Xaa' Xaa Xaa Xaa ' Xaa, Xaa' Xaa' Xaa' Glu Glu Xaa' Glu Xaa' Glu Xaa' Ile Ile Ile Ile Xaa' Xaa' Xaa' Xaa Xaa t Xaa' Xaa' Glu Glu Glu Glu Glu Glu Glu Glu Glu G1u $_{
m GLu}$ Gly Xaa' Glu gluGlu G1uG1yGly Gly \mathtt{Gly} G1yGly \mathtt{GLy} GLyGlyGLy $_{\rm GLy}$ ${\tt GLy}$ $\mathtt{Gl}\mathtt{y}$ GLy $_{
m GLY}$ GLy \mathtt{Gly} GlyGlyGly $_{
m G1y}$ $_{
m GLy}$ Gly Gly G1yCys Cys Cys Cys Cys Cys Сув Cys Cys Сув cysCys Cys Сyв CysCys Cys Xaa' Xaa' Xaa ' Xaa ' Xaa Xaa' Xaa, Xaa' Xaa ' Xaa' Xaaı Xaa' Xaa Xaa' Xaa Xaa' Xaa' Xaa' Xaa t Xaa' Xaa Xaa' Xaa' Xaa' Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Xaa Xaa Xaa Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa Xaa Xaa Xaa' Xaa, Xaa' Xaa 1 Xaa Xaa' Xaa' Xaa, Xaa Xaa Xaa t GlyGlyG1y ${\tt Gly}$ ${\tt Gly}$ \mathtt{Gly} GlyGLy GLy $_{\rm GLy}$ Gly \mathtt{GLy} Gly ${\tt Gly}$ GLyGLyGLyGlyGLy \mathtt{GLy} $_{\rm GLy}$ GlyPro Pro Pro

(sheet 6 of 114)

FIG. 4 (sheet 7 of 114)

(SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO. SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO (SEQID NO: SEQID NO SEQID NO SEQID NO Cys Cys CysCys CysCysAla Ala Xaa' Cys Thr Gly Cys Cys Xaa' Thr Gly Cys Cys Gly Cys Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' Ala Xaa' Ala Cys Thr Gly Cys Gly Xaa' Cys Thr Gly Cys Xaa' Cys Thr Gly Cys \mathtt{Gly} Xaa' Tyr Ala Ala Cys Thr Gly Thr Xaa' Gly Gly Xaa' Ala Xaa' Ala Cys Thr Gly Thr Xaa' Gly Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys Xaa' Thr Gly Xaa' Gly Tyr Xaa' Ala Ala Cys Thr Gly Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Xaa' Ala Ala Cys Thr Gly Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Thr Gly Cys Ala Ala Cys Thr Gly Cys Thr Thr Thr Thr Ala Tyr Ala Ala Xaa' Ala Ala Cys Ala Tyr Ala Ala Cys Tyr Ala Ala Cys Ala Cys Cys Xaa' Ala Ala Cys Ala Tyr Ala Ala Ala Ala Cys Ala Tyr Xaa' Ala Ala Ala Ala Xaa' Ala Ala Tyr Ala Xaa' Ala Xaa' Ala Ala Xaa' Ala Xaa Ala Xaa' TYrTyr Tyr TyrXaa Xaa Xaa' Tyr Xaa' Ala Ala Xaa' Xaa ' Xaa Xaa 1 Xaa Xaa Xaa' Ala Xaa' $\mathbf{T}\mathbf{y}\mathbf{r}$ TyrCys Ala Tyr TyrTXaa Xaa' Xaa ' Ala Cys Ala Cys Ala Cys. Cys cyscysCys Сув CysCys Cys Cys Cys Cys Ile Ile Ile Ile IIe Ile Ile Ile Ile Ile Ile Ile II.e Ele Ile Ile Ile Glu Glu Glu Glu Glu GluGlu Glu Glu Glu Glu Glu ${\tt Glu}$ Glu Glu Glu Glu Glu Glu Glu Glu G1y $_{
m G1y}$ G1yGly \mathtt{Gly} G1yG1yGlyG1y $_{\rm GLy}$ Gly \mathtt{GLy} G1yGlyGlyG1yGLy ${\tt GLy}$ Gly ${\tt GLy}$ Gly GlyGly Cys Cys Cys Cys Cys Cys Ċys CysCys CysCys Cys Cys Xaa' Xaa' Xaa, Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa, Xaa' Xaa Xaa Xaa1 Xaa' Xaa Xaa' Xaa' Xaa' Xaa 1 Xaa' Xaa' Xaa' Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa' Xaa' Xaa Xaa' Xaa ' Xaa Xaa' Xaa Xaa Xaa Xaa' Xaa Xaa Xaa Xaa, Xaa' Xaa' Xaa' $\text{Gl} \gamma$ G_{1y} G1yGlyGlyG1yG1y $\mathtt{Gl}\mathtt{y}$ Gly $_{
m G1y}$ Gly \mathtt{GLy} GlyGlyGly $_{\rm Gly}$ GLYGLyGLyGly $\text{Gl} \underline{y}$ Pro Pro

FIG. 4 (sheet 8 of 114)

(SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: Cys CysCys CysXaa' cysCysCysCyscysСув CysCys Cys Xaa' Gly Xaa' Cys Xaa' Thr Gly Cys Xaa' Xaa' Gly Cys Xaa' G1yGly G1yGLyGLyXaa' Thr Gly Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Xaa' Gly Gly Xaa' Xaa' Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Gly Xaa' Gly Cys Xaa' Cys Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Cys Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Thr Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Thr Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Glu Ile Cys Ala Tyr Ala Ala Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Gly Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Xaa' Thr Thr Thr Thr Thr Thr Thr Thr Ala Tyr Ala Ala Ala Tyr Ala Ala Tyr Ala Ala Cys Cys Cys Ċys Ċys Cys Ile Cys Ala Tyr Ala Ala Cys Ala TyrTyrTyrTyrTyrTyrTYrTYrTYTTyrAla Ala Ala Ala Ala Ala Ala Cys Cys Ċys Xaa, Xaa' Gly I1eIle Gly GLyGlu Glu Glu Glu Glu Glu Glu Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa' \mathtt{Gly} ${\tt Gly}$ ${\tt Gly}$ G1yG1YG1y ${\tt Gly}$ GlyGly $\mathtt{Gl} \mathbf{y}$ GlyGlyG1yCys Cys Cys Cys Cys Xaa' Cys Xaa' Xaa Xaa 1 Xaa Xaa Xaa Xaa' Xaa' Xaa' Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa' Xaa' Xaa' Xaa1 Cys Cys Cys Cys Thr Thr Thr Thr Thr $\operatorname{Th} \mathcal{L}$ Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa' Xaa' Xaa Xaa' Xaa Xaa, Xaaı Xaa Xaa Xaa' Xaa' Xaa Xaa' G1yGlyGlyglyG1yG1YGly ${\tt Gly}$ $_{\rm Gly}$ \mathtt{Gl}_{Y} $_{
m GLy}$ GlyG1y $_{\rm Gly}$ GlyGLyPro Pro Pro

SEQID NO: SEQID NO: SEQID NO: SEQID NO SEQID NO SEQID NO SEQID NO SEQID NO SEQID NO (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO SEQID NO: SEQID NO SEQID NO Cys CysCysCysXaa' Thr Gly Cys Cys Xaa' Cys Cys Cys Cys Cys Cys Cys Xaa Cys Xaa' GLyTyr Ala Ala Cys Thr Gly Thr Xaa' Gly Ala Tyr Ala Ala Xaa' Cys Thr Gly Ala Tyr Ala Ala Cys Thr Xaa' Gly Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Tyr Ala Ala Cys Thr Gly Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Tyr Ala Ala Cys Thr Gly Cys Tyr Xaa' Ala Ala Cys Thr Xaa' Ala Ala Cys Thr Tyr Ala Ala Cys Xaa' Thr Gly (Ala Tyr Ala Xaa' Ala Cys Thr Tyr Ala Ala Xaa' Cys Thr Thr Xaa' Ala Tyr Ala Ala Cys Thr Gly Ala Xaa' Tyr Ala Ala Cys Cys Ala Tyr Ala Ala Cys Thr Cys Ala Tyr Ala Ala Cys Thr Ala Tyr Ala Ala Cys Thr Tyr Ala Ala Tyr Ala Ala Xaa' Cys Cys Tyr Ala Ala Tyr Ala Ala Ala Ala Tyr Ala Ala Cys Ala Cys Ala Cys Xaa' Ala Ile Xaa' Cys Ala Tyr Ala Ala Ala Cys Ala Glu Ile Cys Cys Cys Cys Cys Cys Cys Ile Ile Ile Ile Ile Ile Ile Ile I1eTle Tle Xaa' Xaa Xaa' Ile Xaa' Xaa' Xaa' Glu Glu Glu Glu Glu Glu Xaa' Xaa' Xaa, Xaa Glu Xaa' Xaaı Xaa Xaa Xaa' Xaa Glu Xaa' Xaa' Ile Ile Xaa ' Xaa Xaa' Xaa' Xaa' Xaa ' Xaa, Glu Glu G]u Glu Glu Glu Glu Glu Glu Glu Glu \mathtt{Gly} GLYG1yGLyGly GLyGlyGlyG1y \mathtt{Gly} GlyGLyGly G1yGlyGLYGlyGlyGLyGLyXaa' Xaa' Xaa Xaa, Xaa' Xaa' Xaa' Xaa Xaa' Xaa Xaa t Xaa, Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa Cys Cys Ċys Cys Cys Cys Cys CysCys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa1 Xaa1 Xaa' Xaa' Xaa' Xaa' Xaa 1 Xaa Xaa' Xaa' Xaa t Xaa, Xaa ' Xaa' Xaa Xaa, Xaa' Xaa' Xaa' Xaa' Xaa 1 GlyGly Gly GLyGlyGlyGLyG1yGlyGlyGlyGly Gly Gly ${
m Gly}$ GLyGlyG1yGly Pro Pro

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| (SEQID NO: | (SEQID NO: |
|--|---|
| Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Hy Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Cys Gly Glu IIe Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Thr Gly Cys Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Thr Gly Cys Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Thr Gly Cys Cys Ala Tyr Ala Xa | Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys |
| Pro Gly Xaa' Thr Cys Xaa' | Gly Xaa' Thr Cys |

SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO SEQID NO (SEQID NO SEQID NO SEQID NO Cys CysCys Cys Cys Cys Xaa' Xaa' Xaa' Gly Cys Gly Xaa' Xaa' Cys Xaa' Cys Xaa' Xaa' Cys Cys Xaa' Cys Xaa' Cys Thr Gly Cys Xaa' Xaa' GlyXaa' Thr Gly Thr Xaa' Gly Xaa' Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly GLyCys Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Cys Thr Gly Cys Xaa' Tyr Ala Ala Xaa' Cys Thr Cys Xaa' Thr Xaa' Ala Tyr Ala Ala Cys Thr Tyr Xaa' Ala Ala Cys Thr Tyr Ala Xaa' Ala Cys Thr Thr Xaa' GlyGLy $\mathtt{GL}\mathtt{y}$ G1yGly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Thr Xaa' Gly Xaa' Gly Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Ala Xaa' Tyr Ala Ala Cys Thr \mathtt{Thr} \mathtt{Thr} Thr Xaa' Cys Xaa' Xaa' Xaa' Xaa' Xaa' Thr Thr Thr Thr Tyr Ala Ala Ala Cys Cys Cys CysCys Cys Çys Ċys Cys Cys Ala Tyr Ala Glu Ile Cys Ala Tyr Ala Cys Ala Tyr Ala Tyr TyrTyrTyrTyrTyrTyrTyr Tyr Tyr TyrAla Ala Ala Ala Cys Ala Ala Ala Cys Ala Cys Ala Ile Ile Ile Ile I1eCys Cys Glu Glu Ile Ile Ile Ile Ile Glu Ile Ile Glu Ile Xaa Xaa' Xaa t Xaa' Xaa' Xaa' Xaa, Glu Gly \mathtt{Gly} GlyGLy \mathtt{GLy} GlyGly \mathtt{Gly} GlyGly Gly GLyGlyXaa' Xaa, Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa1 Cys Xaa' Xaa' Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa Xaa Cys Xaa' Xaa' Xaa' Cys Xaa' G1yGly $_{
m G1y}$ Gly $_{\rm Gly}$ Cys Cys Cys Cys Cys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa Xaa' Xaa Xaa' Xaaı Xaaı Xaa Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa, Xaa' Xaa' Xaa' Xaa Xaa Xaa' Xaa' GlyGly Gly G1yG1yGly G1y \mathtt{Gly} GLyGlyGly $G_{1}y$ GLYGLyGlyGlyG1yG1yGLyGlyG1yGlyGly Gly GLYPro Pro Pro

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| - | 9) | |
|--|---|---|
| 170 | Cys | |
| 711 | Xaa' | |
| 3 | ${\tt Gly}$ | |
| | \mathtt{Thr} | |
| 1 | Cys | |
| | Ala | |
| | Ala | ζ |
| 17. | $\mathrm{T}\mathrm{y}\mathrm{r}$ | |
| 1 | Ala | |
| 3 | Xaa' | |
| 7 | Ċys | |
| ; ; | Ile | |
| 1 | Glu | |
| 5 | Xaa, | |
| 7 | \mathtt{Gly} | |
| 7 | Cys | |
| 1 | Thr | |
| the same of a car, when the car area area area area area area area | ily Xaa' Thr Cys Gly Xaa' Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | |
| 7 | $1\sqrt{Y}$ | |

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(SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO SEQID NO SEQID NO SEQID NO SEQID NO SEQID NO Cys Cys Cys Cys Cys Cys Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Tyr Ala Ala Cys Thr Gly Cys Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Tyr Xaa' Ala Ala Cys Thr Gly Cys Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Tyr Ala Ala Cys Xaa' Thr Gly Cys Tyr Ala Ala Cys Thr Xaa' Gly Cys Tyr Ala Ala Cys Thr Gly Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Ala Ala Xaa' Cys Thr Gly Cys Ala Ala Cys Xaa' Thr Gly Cys Thr Gly Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Thr Xaa' Gly Cys Thr Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Ala Tyr Ala Ala Cys Thr Gly Ala Cys Xaa' Thr Gly Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Ala Ala Cys Thr Gly Ala Xaa' Ala Cys Thr Gly Thr Gly Cys Ala Tyr Ala Ala Cys Thr Gly Cys Cys Ala Tyr Ala Ala Cys Thr Gly Cys Cys Thr Gly Cys Ala Ala Cys Ala Ala Ala Ala Cys Ala Xaa TYrCys Ala Tyr Ala Ala Ala Cys Ala Ala Ala Cys Ala Cys Ala Cys Cys Cys Çys Cys Xaa' Cys Xaa' Xaa' Cys Xaa' Xaa Ile Ile Ile Xaa' Ile Xaa' Xaa Ile Xaa' Ile Xaa' Xaa' Xaa' Glu Ile Xaa' Glu Ile Xaa' Glu Ile Xaa' Ile Xaa' Glu Xaa' Xaa Glu Xaa1 Xaa' Xaa' Glu Xaa' Glu Xaa' Ile Ile Glu Ile Glu Ile Glu Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa, Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa ' Xaa Xaa' GlyGly $_{
m GLy}$ $_{
m Gly}$ $_{
m Gly}$ G1yGlyGLyG1y $_{\rm Gly}$ GlyGLYCys Cys Cys Cys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa' Xaa' Xaa 1 Xaa' Xaa' Xaaı Xaa' Xaa, Xaa' Xaa Xaa Xaa, Xaa 1 Xaa1 Xaa' Xaa' Xaa Xaa' Xaa Xaa' Xaa' Gly $_{
m G1y}$ Gly Gly G1y ${\tt GLy}$ G1yG1y ${\tt Gly}$ $_{\rm GLy}$ G1yG1y $_{\rm G1y}$ G1yG1yG1y $_{
m GLY}$ Gly Gly Pro Pro

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m Thr}$ Thr Thr Ala Ala Xaa' Cys 3 Cys Cys Cys Xaa Cys Xaa' Ala Ala Ala Ala Xaa' Xaa ' Xaa' Xaa' Ala Ala Ala Ala Ala Ala Xaa' Ala Ala Ala Ala Ala Ala Xaa' Ala TyrTyrXaa' Xaa Xaa Xaa1 Xaa' Xaa' Xaa' Xaa' Tyr Ala Xaa' Tyr $\mathrm{T}\mathrm{y}\mathrm{r}$ ${
m Tyr}$ Tyr $\mathtt{T}\mathtt{Y}\mathtt{r}$ $\mathtt{T}\mathtt{yr}$ TyrTyr Tyr ${
m Tyr}$ Tyr TyrTYrTyrTyrTyrTyrAla Ala Cys Ala Cys Ala Cys Ala Cys Ala Ala Ala Cys Ala Cys Ala Cys Cys Cys Сув Cys ΠG Ile Ile Ile Ile Ile Ile TIe Glu Glu Glu $_{\rm Glu}$ Glu Glu Glu Glu Glu Glu Glu $_{
m Glu}$ Glu Glu Glu Xaa' Xaa' Xaa 1 Xaa1 Xaa Xaa' Xaa, Xaa ' Xaa' Xaa 1 Xaa Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Gly GlyGly GlyGly GlyGlyGlyGly Gly G1yGLyGlyG1yG1yGly Cys Cys Cys Cys Cys Cys Cys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa 1 Xaa' Xaa' Xaa Xaa' Xaa, Xaa, Xaa' Xaa Xaa' Xaa, Xaa 1 Xaa 1 Xaa' Xaa, Xaa Xaa Xaa' Xaa' G1y $_{\rm Gly}$ G1yGly GlyGlyGly ${\tt Gly}$ $_{
m Gly}$ GLYGlyGLy $_{
m GLy}$ Gly $_{\rm G1y}$ G1yG1yG1yG1yGLyGly GlyPro Pro Pro

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FIG. 4 (sheet 14 of 114)

FIG. 4 (sheet 15 of 114)

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m Tyr}$ $\mathtt{T}\mathtt{Y}\mathtt{x}$ Tyr Tyr Xaa' Xaa Xaa' Xaa' Xaa Xaa, Ala Ala Ala Ala Ala Ala Ala Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' \mathbb{T} yr TYrTyrTyr $\mathtt{T}\mathtt{Y}\mathtt{r}$ Tyr TyrTyrTyrXaa' Xaa' Xaa' Ala Cys CysCys Ile IleIle Xaa Xaa Xaa Xaa' Xaa' Xaa Xaa' Glu Xaa' Glu Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Glu Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa1 Xaa' Xaa' Glu Xaa' Glu Xaa' Glu Xaa' Glu Xaa' Glu $_{
m G1y}$ GLyGlyG1yG1yG1yG1yGlyGly ${\tt Gly}$ GLyGly GlyGly GLyGlyGly Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Xaa Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaa Xaa' Xaa1 Xaa' Xaa' Xaa' Xaa' $_{
m G1y}$ ${\tt Gly}$ $_{
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m GLy}$ Gly G1yGlyGly \mathtt{Gly} $_{\rm Gly}$ \mathtt{Gly} G1y $_{\rm G1y}$ GlyGly ${
m Gly}$ G1yGLyG1yGlyPro Pro Pro

FIG. 4 (sheet 16 of 114)

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m G1y}$ $_{
m G1y}$ Ala Ala Xaa' Cys Xaa' Cys Xaa' Cys Xaa 1 Thr Thr Thr Thr Thr Tyr Ala Ala Cys Thr Cys Thr Thr Tyr Ala Ala Ala Ala Tyr Ala Ala Tyr Ala Ala Tyr Ala Ala Xaa' Xaa' Cys Cys Cys Cys Ala Ala Tyr Ala Xaa' Ala Ala Ala Ala Ala Cys Ala Ala Ala Tyr $_{
m Tyr}$ TyrTyrCys Cys Cys Cys Cys Cys Xaa' Ala Ala Ala Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Cys Cys Cys Cys Cys. Cys Cys Cys Cys Cys Суs Ile Ile Ile Ile Ile Xaa' Ile Tle Ile Ile Ile Ile Xaa' Xaa' Xaa' Xaa, Ile Ile Xaa' Xaa' Xaa Ile Xaa' Ile Xaa' Xaa Xaa1 Xaa' Xaa' Xaa Xaa Xaa' Xaa Xaa Xaa Glu Xaa' Ile Ile Ile Glu Xaa' IIe Ile Ile Xaa, Glu Glu Glu Glu Glu Glu Glu Glu GluGlu GluGlu Glu Glu Gly GLyGlyGly Gly GlyG1y ${\tt GLy}$ Gly $_{
m GLy}$ GLYG1yGlyCys Cys Cys Cys Cys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr $\operatorname{Th} x$ Thr Xaa Xaaı Xaa' Xaa1 Xaa, Xaa' Xaa Xaa' Xaa' Xaa' Xaa Xaa' Xaa, Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa, Xaa' Xaa' Xaaı Xaa GlyGlyGlyG1yGlyG1yGLyGly G1yGlyGLYGlyGlyG1yGlyG1yGly GlyGly ${\tt Gly}$ Pro Pro

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m Tyr}$ TyrXaa Xaa' Tyr Tyr Xaa' Xaa 1 Xaa' Xaa' Xaa' Ala Ala Ala Xaa Xaa' Xaa' Xaa' Xaa' Ala Ala Ala Ala Xaa' Xaa' Xaa' Xaa Tyr Tyr TyrTyr TyrTYYTyr $\mathbf{T}\mathbf{y}\mathbf{x}$ TyrTyrTyrTyxTyrTyr ${ t Tyr}$ Xaa' Xaa' Xaa 1 Xaa' Xaa Ala Ala Xaa Xaa ' Xaa, Ala Ala Ala Ala Ala Ala Ala Xaa1 Ala Ala Ala Ala Ala Cys Ala Ala Ala Ala Ala Ala Ala Cys Ala Cys Xaa' Xaa' Xaa' Xaa' Xaa ' Xaa' Xaa' Xaa' Xaa' Xaa 1 Xaa 1 Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Ile IleIle Ile Ile Glu $_{
m Gly}$ $_{
m GLy}$ GlyGLyG1yGlyG1yGly GIVGLyGlyGLyG1yG1yGly ${\tt GLY}$ \mathtt{Gly} Gly $_{\rm Gly}$ G1yG1yGlyG1yG1y $_{\rm GLy}$ Gly Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr $_{
m Thr}$ Thr Thr Thr Thr Xaa' Xaa ' Xaa, Xaa' Xaa' Xaa' Xaa, Xaa 1 Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' $_{
m G1y}$ GlyGLYGLyGly G1y $_{
m G1y}$ GlyGLY $_{
m GLy}$ GLyGlyGLyGLy $\mathtt{Gl}\mathtt{y}$ Gly Gly ${\tt Gly}$ G1yGly $_{\rm GLy}$ GlyPro Pro Pro

(sheet 17 of 114)

FIG. 4 (sheet 18 of 114)

| Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Xaa' Cy8 Thr. Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Xaa' Cy8 Thr. Xaa' Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Xaa' Cy8 Thr. Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Xaa' Cy8 Thr. Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Xaa' Thr. Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Xaa' Thr. Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Xaa' Thr Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Xaa' Thr Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Xaa' Thr Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr. Xaa' Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr. Xaa' Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr. Xaa' Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr. Xaa' Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr. Xaa' Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr. Xaa' Cy8 Xaa' Xaa' SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr Giy Cy8 Xaa' Xaa' SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Xaa' Cy8 Ala Tyr Ala Ala Cy8 Thr Giy Cy8 Xaa' Xaa' SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Cy8 Xaa' Xaa' Ala Tyr Ala Ala Cy8 Thr Giy Cy8 Xaa' Xaa' Cy8 GEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Cy8 Xaa' Xaa' Ala Tyr Ala Ala Cy8 Thr Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Cy8 Xaa' Xaa' Ala Tyr Ala Ala Cy8 Thr Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Cy8 Xaa' Xaa' Ala Tyr Ala Ala Cy8 Thr Giy Cy8 (SEQID NO. Pro Giy Xaa' Thr. Cy8 Giy Giu Ile Cy8 Xaa' Xaa' Ala Tyr Ala Ala Cy8 Thr Giy Cy8 Thr. Giy Cy8 |
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| Gly Xaa' Thr. Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Cay Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Gly Xaa' Thr. Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Cly Xaa' Gly Xaa' Thr. Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cay Xaa' Gly Xaa' Thr. Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Gly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xai Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Gly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Gly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Gly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Gly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys XGly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cly Cly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Cly Cly Cly Xaa' Thr Cys Gly Glu IIe Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Cly Cly |
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| Cys Gly Glu IIe Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys GS Cys Gly Glu IIe Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys Gly Glu IIe Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Xaa' Tyr Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gs Gly Glu IIe Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Ks Gly Glu IIe Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Ala Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Caly Cys Xaa' Cly Glu IIe Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Cly Glu IIe Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Cly Glu IIe Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Cly Glu IIe Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' Cly Glu IIe Cys Xaa' Al |
| |
| Pro Gly Xaa |

FIG. 4 (sheet 19 of 114)

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| Kaa' Thr Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' | Kaa' Thr Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Kaa' Thr Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Xaa' Cys (| Kaa' Thr Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' (| Kaa' Thr Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Kaa' Thr Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' | kaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Kaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Xaa' Thr | Xaa' Thr Cys Gly Glu Ile | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Xaa' Cys Thr | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Xaa' Thr | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Xaa' Thr | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly (| Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Xaa' Ala Cys Thr | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr | Xaa' Thr Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Gly | Xaa' Thr | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr | Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Xaa' Thr Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Gly | Xaa' Thr |
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| Xaa' Ala Ala Xaa' Xaa' Cys Thr Gly Cys | Xaa' Ala Ala Xaa' Cys Xaa' Thr Gly Cys | Xaa' Ala Ala Xaa' Cys Thr Xaa' Gly Cys | Xaa' Ala Ala Xaa' Cys Thr Gly Xaa' Cys | Xaa' Ala Ala Xaa' Cys Thr Gly Cys Xaa' | Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Xaa' Ala Ala Cys Xaa' Xaa' Thr Gly Cys | Xaa' Ala Ala Cys Xaa' Thr Xaa' Gly Cys | Xaa' Ala Ala Cys Xaa' Thr Gly Xaa' Cys | Xaa' Ala Ala Cys Xaa' Thr Gly Cys Xaa' | Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Xaa' Ala Ala Cys Thr Xaa' Xaa' Gly Cys | Xaa' Ala Ala Cys Thr Xaa' Gly Xaa' Cys | Xaa' Ala Ala Cys Thr Xaa' Gly Cys Xaa' | Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Xaa' Ala Ala Cys Thr Gly Xaa' Xaa' Cys | Xaa' Ala Ala Cys Thr Gly Xaa' Cys Xaa' | Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Xaa' Ala Ala Cys Thr Gly Cys Xaa' Xaa' | Ala Xaa' Ala Cys Thr Gly Cys | Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Ala Xaa' Xaa' Xaa' Ala Cys Thr Gly Cys | Ala Xaa' Xaa' Ala Xaa' Cys Thr Gly Cys | Ala Xaa' Xaa' Ala Cys Xaa' Thr Gly Cys | Ala Xaa' Xaa' Ala Cys Thr Xaa' Gly Cys | \mathtt{Thr} | Ala Xaa' Xaa' Ala Cys Thr Gly Cys Xaa' | Ala Xaa' Ala Xaa' Cys Thr Gly Cys | | Ala Xaa' Ala Xaa' Cys Xaa' Thr Gly Cys | Ala Xaa' Ala Xaa' Cys Thr Xaa' Gly Cys | a Xaa' Ala Xaa' Cys Thr Gly Xaa' | a Xaa' Ala Xaa' Cys Thr Gly | Ala Xaa' Ala Cys Xaa' Thr Gly Cys |
| Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr | Gly Glu Ile Cys Ala Tyr |
| Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Gly Xaa' Thr | Pro Gly Xaa' Thr (| Gly Xaa' Thr | Gly Xaa' Thr |

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m G1y}$ G1yGlyGly G1yGly Pro
FIG. 4 (sheet 23 of 114)

FIG. 4 (sheet 24 of 114)

| FIG. 4 | (sheet 25 of 114) |
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| Gly Thr Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys (| Gly Thr Xaa' Xaa' Xaa' Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys (| Gly Thr Xaa' Xaa' Xaa' Cys Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys (| Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr | Gly Thr | Gly Thr Xaa' Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' Xaa' Xaa' Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Xaa' Cys Xaa' | | Gly Thr Xaa' Xaa' | Gly Thr Xaa' Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Xaa' Cys Xaa' | Gly Thr Xaa' Xaa' Cys Xaa' | Thr | Gly Thr Xaa' Xaa' Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly | | Thr Xaa' Xaa' Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly | Gly Thr Xaa' Xaa' Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Xaa' Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | 'Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Xaa' Cys Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly C | Gly Thr Xaa' Xaa' Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly | Pro Gly Thr Xaa' Xaa' Cys Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys |

FIG. 4 (sheet 26 of 114)

FIG. 4 (sheet 27 of 114)

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m GLy}$ G1y Thr Tyr Ala Ala Ala Xaa' Ala Ala Ala Xaa' Ala Cys Cys Ala Ala Cys Ala Tyr Ala Xaa' Ala Ala Xaa' Ala Ala Xaa' Ala Ala Ala Xaa' Ala Tyr Ala Ala Xaa' $\mathrm{T}\mathrm{Y}\mathrm{r}$ Tyr Tyr Xaa Xaa' TyrTYrXaa' Ala Ala Xaa' Ala Xaa Xaa Xaa Xaa 1 Xaa' Xaa' Xaa' Xaa' Xaa' Tyr ${
m Tyr}$ Tyr $\mathrm{T}\mathrm{y}\mathrm{r}$ TyrAla Ala Cys Ala Ala Cys Ala Cys Cys Cys Cys Cys Cys Cys Ile Ile Ile II e Ile I1eIle Ile IleIle Ile Glu Glu Glu Glu Glu Glu Glu Glu Glu ${\tt Gly}$ \mathtt{Gly} $_{
m GLy}$ G1y $_{\rm Gly}$ GLyG1y $_{\rm Gly}$ $_{\rm GLy}$ Cys Cys Cys Cys Cys Cys Cys CysCys Cys Cys Cys Cys Xaa' Xaa1 Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa Xaa' Xaa' Xaaı Xaa Xaa Xaa Xaa' Xaa 1 Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa, Xaa' Xaa' Xaa Xaa Xaa' Xaa' Xaa Xaa1 Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr G1yGlyGlyGly $_{\rm Gly}$ Gly GlyG1yGlyGLyGlyGlyGlyGLy $_{\rm Gly}$ $_{\rm Gly}$ GLyG1yPro Pro
FIG. 4 (sheet 28 of 114)

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| Pro Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | Thr Xaa' Xaa' Cys Gly Glu Ile | Gly Thr Xaa' Xaa' | Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr | Gly Thr Xaa' Xaa' Cys | Gly Thr Xaa' Xaa' Cys | Gly Thr | Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr | Thr Xaa' Xaa' | Gly Thr Xaa' Xaa' | Gly Thr Xaa' Xaa' | Gly Thr Xaa' Xaa' Cys | Gly Thr Xaa' Xaa' | Gly Thr Xaa' Xaa' Cys | Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Xaa' Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' Cys Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys Xaa' Xaa' Gly Xaa' Glu Ile | Gly Thr Xaa' Cys Xaa' Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala | Gly Thr Xaa' Cys Xaa' Xaa' | Gly Thr Xaa' Cys Xaa' Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Xaa' Xaa' | Gly Thr Xaa' Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly | Thr Xaa' Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' | Pro Gly Thr Xaa' Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' |
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| FIG. 4 (sheet 29 of 114) | ` |
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| Xaa' Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Gly Xaa' Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Xaa' Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly' Gly Xaa' Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly | Xaa' Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly | 'Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly | Xaa' Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | ' Gly Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' | Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys | 'Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly | ' Gly Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly | Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly | Xaa' Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | | Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys |
| Cys x Cys x Cys x | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pro Gly Thr Xaa' Pro Gly Thr Xaa' Pro Gly Thr Xaa' | Gly Thr | Gly Thr | Gly Thr | Pro Gly Thr Xaa' | $_{ m Gly}^{'}$ Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | ${\tt Gly\ Thr}$ | Gly Thr | Gly Thr | Gly Thr | Gly Thr | ${\tt Gly}~{\tt Thr}$ | Gly Thr | ${\tt Gly~Thr}$ | Gly Thr | | Gly Thr |

FIG. 4 (sheet 30 of 114)

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m Gly}$ G1yGly \mathtt{Gly} Gly \mathtt{Gly} Gly G1yGlyXaa Xaa 1 Xaa' Xaa 1 Xaa' Xaa' Xaa Xaa' Xaa Xaa' Xaa' Xaa Xaa Xaa ' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Cys Xaa' Xaa' Xaa, Xaa, Xaa1 Xaa' Xaa Xaa' Xaa ' Xaa Xaa' Xaa' Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr G1yGly $_{
m GLy}$ GlyGLyGlyGlyG1y $_{\rm G1y}$ GlyG1yGLyGLy \mathtt{Gly} GlyGLyGlyG1yGlyPro Pro
FIG. 4 (sheet 31 of 114)

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| Gly Thr Xaa' Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' Cys Gly Xaa' Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys | Gly Thr Xaa' | Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Xaa' Cys Gly Xaa' Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly | Gly Thr Xaa' |

FIG. 4 (sheet 32 of 114)

FIG. 4 (sheet 33 of 114)

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| Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly | Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys | Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' | Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys | Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Glu Ile Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | 'Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys | Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys | 'Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys | 'Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' | () | Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Gly | ' Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys |
| Gly Thr Xaa' Cys Gly Xaa' | Thr Xaa' Cys Gly Xaa' | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' | Gly Thr Xaa' Cys | Gly Thr Xaa' |

FIG. 4 (sheet 34 of 114)

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| Gly Thr Xaa' Cys Gly Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' (Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys (| Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Gly Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys | |
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FIG. 4 (sheet 36 of 114)

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| Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Xaa' Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys | Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Gys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Xaa' IIe Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' Thr Xaa' Cys Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' Thr Xaa' Cys Gly Glu IIe Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Xaa' Xaa' Chr Xaa' Cys Gly Glu IIe Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Thr Xaa' Cys Gly Glu IIe Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Xaa' Xaa' Chr Xaa' Cys Gly Glu IIe Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Thr Xaa' Cys Gly Glu IIe Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Thr Cys Ala Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Cys Cys Gly Glu IIe Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly | Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Caly Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Ile Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys |
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FIG. 4 (sheet 37 of 114)

(SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO: SEQID NO: SEQID NO: (SEQID NO: (SEQID NO: SEQID NO SEQID NO. SEQID NO: SEQID NO SEQID NO Cys Cys Cys CysCys Xaa' Thr Gly Cys Thr Gly Xaa' Cys Cys Thr Gly Cys Xaa' Cys Cys CysCys Cys Cys Thr Gly Cys Cys Thr Xaa' Gly Cys Xaa' Ala Cys Thr Gly Cys Xaa Ala Ala Cys Xaa' Thr Gly Cys Ala Ala Cys Thr Gly Cys Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Ala Ala Cys Thr Gly Ala Xaa' Ala Cys Thr Gly Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Gly Thr Gly Xaa' Xaa' Ala Ala Cys Thr Gly Ala Xaa' Ala Cys Thr Gly Thr Gly Xaa' Cys Cys Thr Gly Cys Thr Gly Cys Thr Xaa' Thr Thr Gly GlyXaa 1 Cys Cys Ala Ala Cys Ala Ala Cys Ala Ala Cys Ala Ala Ala Ala Xaa' Ala Ala Xaa' Ala Ala Ala Ala Xaa' Ala Ala Xaa' Ala Ala Xaa' Ala Ala Ala Xaa' Tyr Xaa' Ala Ala Ala Tyr TyxTyr ${
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m Tyr}$ Xaa' TyrXaa' Xaa' Xaa' Ala Ala Ala Xaa' Xaa' Xaa Xaa Ala Ala Ala Xaa Xaa' Xaa¹ Xaa' Ala Xaa' Tyr TyrTyr Tyr TyrTyrXaa' Xaa' Ala Ala Ala Ala Ala Ala Ala Ala Cys Ala Ala Cys Ala Cys Ala Cys Cys Cys Cys Cys Cys Cys Cys Cys Xaa' Xaa' Xaa' Xaa 1 Xaa' Xaa Xaa' Xaa Xaa, Xaa Xaa Xaa' Xaa' Ile Xaa' Xaa' Xaa Ile le Glu $_{
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m G1y}$ \mathtt{Gly} G1yG1yGlyGlyGlyGly G1yGlyCys Cys Cys Cys Cys Xaa, Xaa Xaa ' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr Thr Thr Thr GlyGly \mathtt{Gly} GLyG1yGly ${\tt Gly}$ $_{\rm Gly}$ GlyGLyGly GlyG1yGlyG1yGlyGlyPro Pro
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| Gly Thr Xaa' Gly Thr Xaa' | Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys X | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Gly Thr Yaa' Gly | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Xaa' Cys Gly Thr Xaa' Cys | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Xaa' | Gly Thr Xaa' Cys Gly Thr Xaa' Cys | Gly Thr Xaa' Cys Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly | Gly Thr Xaa' Cys Gly | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr ? | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Xaa' Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Xaa' Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Xaa' Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | GIY INK Kaa' CYS GIY GIU 11e CYS Kaa' Ala Kaa' IYK Ala Ala CYS INK GIY | Gly Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly | Gly Thr Xaa' | FIG. 4 | (sueet 50 01 1.14) |

FIG. 4 (sheet 39 of 114)

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| Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Xaa' Ala Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Thr Xaa' Cys Gly Glu lle Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys | Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Cys Xaa' Cys Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Cys Cys Cys Cys Cys Cys Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Cys Cys Cys Cys Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys |
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FIG. 4 (sheet 40 of 114)

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| Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Xaa' Cys | In Add Cys Giy Giu ile Cys Add' Ald Tyr Ald Ald Cys Thr Gly Xaa' Cys Xaa' Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ald Tyr Ald Ald Cys Thr Gly Cys Xaa' Thr Xaa' Cys Gly Glu Ile Cys Xaa' Ald Tyr Ald Ald Cys Thr Gly Cys Xaa' Xaa' | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Ars Thr Cha | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys (| Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Xaa' Ala Ala Cys Thr Gl y Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys (| Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys (| Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys (| Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | Thr Xaa' Cys Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys |
| | | Pro G Pro G | | | | | | | | | | | | | | | | | | | Pro Gly | | | | | Pro Gly | Pro Gly |

FIG. 4 (sheet 41 of 114)

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FIG. 4 (sheet 43 of 114)

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| Cys | | | | | | | | | | | | | | | | | | | | | | | | | _ | | | _ |
| Pro Gly Thr Xaa' Pro Gly Thr Xaa' | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | GLY Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | Gly Thr | $^{-}$ | Gly Thr | Gly Thr |

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FIG. 4 (sheet 46 of 114)

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m G1y}$ GLy ${\tt Gly}$ GLyGly GlyG1yGlyGlyG1yGly Pro
FIG. 4 (sheet 47 of 114)

| Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys The Xaa' Gly Cys Xaa' (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Cys The Gly Cys Xaa' (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys Xaa' (SEQID NO) Pero Gly The Cys Xaa' Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' The Gly Cys (SEQID NO) Pero Gly The Cys Xaa' Xa |
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FIG. 4 (sheet 48 of 114)

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m Gly}$ Cys Ala Xaa' Tyr Ala Ala Glu Xaa' Ile Cys Ala Tyr Ala Ala Ile Xaa' Cys Ala Tyr Ala Ala Tyr Xaa' Ala Ala Ala Xaa' Ala Ala Ala Xaa' Thr Thr Thr Cys Ala Tyr Ala Ala CysCys Tyr Ala Ala Cys Tyr Ala Ala Tyr Ala Ala Xaa' Glu Ile Cys Ala Tyr Ala Ala ' Ala Cys Ala Cys Ala Cys ; Cys Cys Ċỳs Cys Cys Cys Ala Ile Ile Ile Ile Ile Ile Ile IleIle Xaa Ile Glu Ile Xaa' Glu Ile Xaa' Glu Ile Glu Ile Xaa' Glu Ile Xaa' Glu G]n Glu Glu GluGlu Glu Xaa' Xaa' Glu Xaa' Ile Ile Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Glu Glu Glu Xaa Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa Gly Xaa' Gly Xaa' Gly Xaa' Gly Xaa' Xaa' Gly Xaa' Xaa' Xaa' Xaa' Gly Xaa' Gly Xaa' Xaa' GlyG1y $_{
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m GLy}$ \mathtt{Gly} ${\tt Gl}_{Y}$ GLy $_{
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m GLy}$ Gly ${\tt GLy}$ G1yGlyG1yGlyGlyGLyPro Pro
FIG. 4 (sheet 49 of 114)

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| a Cys Thr Cys Thr Xaa' Thr Thr Xaa' Thr Gly | Xaa' Kaa' LIE Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Kaa' Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Kaa' Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Kaa' Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Cily Cys Thr Gly Cys Xaa' IIE Cys Ala Xaa' Tyr Ala Ala Cys Thr Cily Cy | (sheet 51 of 114) |
| 61y G 61y G 61y G 61y G 61y G 61y G | | |
| Pro Gly Thr Cys Xaa' Pro Gly Thr Cys Xaa' Pro Gly Thr Cys Xaa' Pro Gly Thr Cys Xaa' Pro Gly Thr Cys Xaa' | 619 Thr Cys | |

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| Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly X Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly C Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly C Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr | Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Cys Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Cys Ala Tyr Xaa' Ala Ala Cys Thr Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly | Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Ile Cys Ala Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys Ile Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys Ile Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys | Cys Ala Tyr Ala Xaa' Ala Cys Inr Gly Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Ala Tyr Ala Ala Xaa' Cys Thr Cys Ala Tyr Ala Ala Xaa' Cys Thr Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly | Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys YCys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Thr Gly Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' Thr Cys Xaa' Thr Gly Cys Xaa' Thr Cys X | lle Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys |
| Xaa' Gly Glu | Gly Thr Cys Xaa' Gly Glu Xaa' Gly Thr Cys Xaa' Gly Glu Xaa' Gly Glu Xaa' Gly Thr Cys Xaa' Gly Glu Xaa' Gly Thr Cys Xaa' Gly Glu Xaa' Gly Thr Cys Xaa' Gly Glu Xaa' | Gly Thr Cys Xaa' Gly Glu Xaa' | Gly Thr Cys Xaa' Gly Glu Xaa' | Gly Thr Cys Xaa' Gly Glu Xaa' | Pro Gly Inr Cys Xaa' Gly Glu Xaa' I Pro Gly Thr Cys Xaa' Gly Glu Xaa' I Pro Gly Thr Cys Xaa' Gly Glu Xaa' I Pro Gly Thr Cys Xaa' Gly Glu Xaa' I Pro Gly Thr Cys Xaa' Gly Glu Xaa' I Pro Gly Thr Cys Xaa' Gly Glu Xaa' I Pro Gly Thr Cys Xaa' Gly Glu Xaa' I |

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| Pro Gly Thr Cys Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' (S Pro Gly Thr Cys Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' |
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| Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Kaa' Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Kaa' Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Kaa' Ala Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Kaa' Ala Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Kaa' Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Kaa' Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Kaa' Cys Thr. Kaa' Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Cys Thr. Kaa' Cys Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Cys Kaa' Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Cys Kaa' Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' Cys Ala Tyr Ala Ala Cys Kaa' Thr. Gly Cys Pro Gly Thr. Cys Kaa' Gly Glu Lie Kaa' | | |
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| Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Xaa' Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Xaa' Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys GEOD Gly The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' The Gly Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys The Xaa' Cys The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys The Xaa' Cys The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys The Xaa' Cys The Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys The Xaa | | |
| Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr. Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr. Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr. Gly Cys Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr. Gly Cys Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Cly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Cly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr. Gly Cly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr. Gly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr. Gly Cly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr. Gly Cly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr. Gly Cly Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Thr. Gly Cys Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr. Gly Cys Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr. Gly Cys Gly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr. Xaa' Gly Cly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr. Xaa' Gly Cly Thr. Cys Xaa' Gly Glu IIe Xaa' Cys Ala Tyr Ala Ala Cys Thr. Xaa' Gly Cly Thr. Cys Xaa' Gly Glu I | (SEQID NO: | |
| | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Cly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Gly Thr | Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Gly Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' |

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| Thr Cys Xaa' Gly Glu Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Aaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | . Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys (| Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys (| Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys (| Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' (| Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys (| Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys (| |
| Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | | | | Pro Gly | | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | Pro Gly | _ | Pro Gly | |

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| Pro Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys Pro Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly | Fro Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys Pro Gly Thr Cys Xaa' Gly Glu Tle Cys Xaa' Ala Twr Ala Ala Xaa' Cys Thr Yaa' Cly Cys | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' | Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys X | Gly Thr Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' | Gly Thr Cys Xaa' | Gly Thr Cys Xaa' Gly | Gly Thr Cys Xaa' | Gly Thr Cys Xaa' | Gly Thr Cys Xaa' Gly Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys X | Gly Thr Cys Xaa' Gly | Gly Thr Cys Xaa' Gly Glu | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Xaa' Cys Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys | Thr Cys Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Ala Ala C | Pro Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Xaa' Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | FIG. 4 (sheet 56 of 114) | |

FIG. 4 (sheet 57 of 114)

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| Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Ala Xaa' Ala Cys Thr Gly Cys Ala Xaa' Ala Cys Thr Gly | Ala Xaa' Ala Xaa' Cys Thr Gly Ala Xaa' Ala Cvs Xaa' Thr Glv | Ala Xaa' Ala Cys Thr Xaa' Gly | Xaa' Ala Cys Inr Gly | Tyr Ala Ala Xaa' Cys Thr Gly Cys | Ala Ala Xaa' Cys Xaa' Thr Gly | Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys | Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys | Ala Xaa' Cys Thr | Tyr Ala Ala Cys Xaa' Thr Gly Cys | Ala Cys Xaa' Xaa' Thr | Ala Cys Xaa' Thr Xaa' Gly | Ala Ala Cys Xaa' Thr Gly Xaa' | Ala Ala Cys Xaa' Thr Gly | Tyr Ala Ala Cys Thr Xaa' Gly Cys Tyr Ala Ala Cys Thr Xaa' Xaa' Gly Cys | Ala Ala Cys Thr Xaa' Gly Xaa' | Cys Thr Xaa' | Tyr Ala Ala Cys Thr Gly Xaa' Cys | Tyr Ala Ala Cys Thr Gly Xaa' Xaa' Cys | Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' | Ala Cys Thr | Ala Cys Thr | Xaa' Ala Ala Cys Thr Gly Cys | |
| Glu Ile Cys Ala Xaa' Glu Ile Cys Ala Xaa' Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' ' Xaa' Gly Glu Ile Cys Ala Xaa' ' Xaa' Gly Glu Ile Cys Ala Xaa' ' | Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Ada Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xa | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys | Xaa' Gly Glu Ile Cys Ala Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr | |
| Pro Gly Thr Pro Gly Thr Pro Gly Thr | G1y G1y G1y | Gly | Gly | G1y | Gly Gly | GLY | GLy GLy | $\mathtt{Gl} \mathtt{y}$ | $\mathtt{Gl}\mathtt{y}$ | $\mathtt{Gl}\mathtt{y}$ | $\mathtt{Gl}\mathtt{y}$ | ${\tt Gly}$ | ${\tt GLy}$ | $_{ m G1y}$ | $_{ m GLy}$ | G17 | G1y | G1y | $\mathtt{G1}\mathtt{y}$ | ${\tt Gly}$ | $\mathtt{G1}\mathtt{y}$ | ${\tt Gly}$ | | Gly | |

FIG. 4 (sheet 58 of 114)

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m Thr}$ Ala Ala Xaa' Xaa' Xaa' Xaa' Xaa' Ala Cys Cys Cys Cys Cys Cys Cys Cys Cys Tyr Xaa' Ala Ala Cys Ala Xaa' Xaa' Xaa' Xaa' Xaa' Ala Xaa' Xaa' Ala Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa 1 Xaa' Xaa' Xaa 1 Xaa, Xaa' Xaa' Xaa' Xaa' Xaa, Xaa Xaa' Xaa' Tyr $\mathrm{T}\mathrm{Y}\mathrm{r}$ TYrTyrTyrTyr $\mathtt{T}\mathtt{yr}$ TyrTyr $\mathrm{T}\mathrm{y}\mathrm{r}$ TyrTyrTyrTyr ${
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m Tyr}$ TyrTyrAla Ala Cys Cys Cys CysCys Cys Ile Ile Ile Ile Ile Ile Ile Ile Ile IleIle Ile IleIle 11e Ile Ile IleIle Glu GIn Glu Glu Glu Glu $_{
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m G1y}$ Gly GlyGlyG1yGly \mathtt{Gly} G1yG1yGly G1yGlyGly GlyGly Xaa' Xaa' Xaa' Xaa' Xaa' Xaa 1 Xaa' Xaa' Xaa ' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' CysCys Cys Cys CysCys Cys Cys Cys Cys Thr hr Thr Thr ${\tt Gly}$ Gly ${\tt Gly}$ GlyGLyGlyG1yG1y \mathtt{Gly} ${\tt Gly}$ G1yGlyGlyGly GlyGlyGlyG1y $_{\rm GLy}$ G1yGLyGlyPro Pro
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| Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Xaa' Cys (SE | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Xaa' Thr Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Xaa' Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Xaa' Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Xaa' Thr Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Xaa' Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Gly Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Xaa' Gly Cys | Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Xaa' Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' | Ala Ala Cys Xaa' Thr Gly Cys Xaa' Xaa' | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Xaa' Gly Cys | Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Xaa' Gly Cys (SE |
| Gly Thr | | Gly Thr | Gly Thr | Gly Thr | Gly Thr | ly Thr | Gly Thr | ly Thr | | ly Thr | ly Thr | ly Thr | ly Thr | ly Thr | | ly Thr | ly Thr | ly Thr | $1_{ m Y}$ Thr | ly Thr | | ly Thr | ly Thr | Gly Thr | | ly Thr | ly Thr | Gly Thr | ly Thr | Gly Thr | | Gly Thr | ly Thr |
| Pro G | | | Pro G | - | _ | | Pro G | | | | | | | | | | | | | | | | | Pro G | | | | | | | _ | Pro G | |

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| Gly Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Xaa' | Pro Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys | Gly Thr Cys | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' | Pro Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys Xaa' Gly Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr | Gly Thr Cys | Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys | Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys Gly Xaa' Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly C | Thr Cys Gly Xaa' Xaa' Glu Xaa' Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys |

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| Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Xaa' Cys Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' Cys Thr Cys Gly Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Gly Thr Cys Gly Xaa' Xaa' Glu Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' X Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Cys Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly | Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Xaa' Ala Cys Thr Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Cys Thr Xaa' Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Cys Thr Gly X Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Cys Thr Gly X Gly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Cys Thr Gly X Cly Thr Cys Gly Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Coly Thr Cys Gly Xaa' Glu Xaa' Xaa' 11e Cys Ala Tyr Ala Ala Cys Thr Gly Coly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Coly Thr Cys Gly Xaa' Glu Xaa' Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Gly Coly Thr Cys Cly Thr Cys Gly Xaa' Thr Cys Gly Xaa' Thr Cys Ala Tyr Ala Ala Cys Thr Gly Coly Thr Cys Cly Thr Cy | Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Glu Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Pro Gly Thr Cys Gly Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gys Gly Thr Cys Gly Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Cys Cys Thr Cys Gly Thr Cys Gly Thr Cys Gly Xaa' Ile Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Thr Gly Cys Cys Thr Gys Cys Thr G |

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FIG. 4 (sheet 67 of 114)

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m GLy}$ Gly GlyGly G1yCys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr $_{\rm Gly}$ G1yGlyG1y $_{\rm GLy}$ G1yG1yGly \mathtt{Gly} $_{\rm Gly}$ GLyGLyGlyG1yG1y \mathtt{Gly} GlyG1yGlyGlyGlyPro Pro
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m Tyr}$ Xaa TyrTyr Tyr TyrTyrTyrTyr Tyr Tyr TyrTyr $\text{T} \chi r$ TyrAla Ala Cys Ile Ile Ile Ile Glu Ile Ile Ile I1eIle Ile Ile Ile Ile Ile Ile The I1eIle Ile Glu Ile Glu Ile Glu Ile Ile Glu Ile Glu GLuGlu Glu Xaa' Xaa' Xaa' Xaa' Xaaı Xaa ' Xaa, Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' GlyGly G1yGly Gly GIyG1yGlyG1yGly G1yGly Gly Gly Gly Gly G_{1} $_{\rm Gly}$ ${\tt Gly}$ GlyGLyGLyGlyGlyGLyG1yCys Cys Cys Cys Cys Cys cysCys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Gly GlyG1yGly G1yG1yGlyGlyGLy ${\tt Gly}$ GLyGlyGlyG1yG1yGly ${\tt GLy}$ GLyGlyGlyGlyG1yGly Pro
FIG. 4 (sheet 73 of 114)

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FIG. 4 (sheet 75 of 114)

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| Pro Gly Thr | GLY Gly | GLy | $_{ m GLy}$ | \mathtt{Gly} | ${	t Gly}$ | Gly | Gly | ${\tt Gly}$ | $_{ m GLy}$ | Gly | Gly | \mathtt{Gly} | GLy | \mathtt{Gly} | \mathtt{Gly} | $_{ m G1y}$ | ${\tt Gly}$ | \mathtt{Gly} | Gly | \mathtt{Gly} | ${\tt Gly}$ | \mathtt{Gly} | $\mathtt{Gl}\mathtt{y}$ | \mathtt{Gly} | ${\tt Gly}$ | ${\tt Gly}$ | $\mathtt{Gl}\mathtt{y}$ | ${\tt Gly}$ | ${\tt Gly}$ | $\mathtt{Gl} \mathtt{y}$ | \mathtt{Gly} | ${\tt Gly}$ |

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| Ile Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys X Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | .' ile Cys Ala Xaa' 1yr Xaa' Xaa' Ala Ala Cys 1nr Gly Cys '' Ile Cys Ala Xaa' Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | 'Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Xaa' Cys Thr Gly | ' lle Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys ' lle Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | l Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Xaa' | ' Ile Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | ' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly (| ' Ile Cys Ala Xaa' Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr | ' Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr | ' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Xaa' Thr Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr | ' Ile Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' |
| Thr Cys Gly Glu Thr Cys Gly Glu | Gly Thr Cys | Gly Thr Cys Gly Glu | Gly Thr Cys | Gly Thr Cys Gly Glu | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly (| Gly Thr Cys |

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| Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' Xaa' Gly | Gly Thr Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr Xaa' | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys Gly Glu Xaa' Ile Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr | Xaa' Xaa' Xaa' Cys Ala Tyr Ala Ala Cys Thr Gly | Gly Thr Cys Gly Glu Ile Xaa' Xaa' Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys | Gly Thr Cys |

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| Cys Xaa' Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Xaa' Ala Tyr Xaa' Ala Ala Cys Thr Gly | Cys Xaa' Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Cys Xaa' Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Cys Xaa' Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Cys Xaa' Ala Tyr Ala Ala Cys Thr Xaa' Gly Cys | Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Xaa' Cys | Cys Xaa' Ala Tyr Ala Ala Cys Thr Gly Cys Xaa' | Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys | Cys Ala Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys | Cys Ala Xaa' Tyr Xaa' Ala Ala Cys Thr Gly Cys | Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys | Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys | Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' | Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Cys Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Cys Ala Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys | Cys Ala Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Cys Ala Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys | Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | FIG. 4 | (sheet 86 of 114) |
| Gly Thr Cys | e Xaa' | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | | |

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m GLy}$ GlyG1yG1y ${\tt Gly}$ G1y Gly ${\tt Gly}$ \mathtt{Gly} \mathtt{Gly} GlyGlyGLyGLyGlyGly ${\tt Gly}$ GlyGly Pro
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(SEQID NO: (SEQID NO: SEQID NO: SEOID NO. (SEQID NO: SEQID NO SEQID NO SEQID NO: SEQID NO SEQID NO Cys Cys Cys Gly Xaa' Cys Cys CysCys Cys Cys Cys Cys CysCys Xaa' Thr Gly Cys Thr Xaa' Gly Cys Cys Xaa' Thr Gly Cys Ala Xaa' Ala Cys Thr Xaa' Gly Cys Xaa' Ala Cys Thr Gly Xaa' Cys Thr Gly Cys Xaa' Gly Cys Xaa' Ala Cys Thr Gly Cys Xaa' Thr Gly Cys Xaa' Xaa' Cys Xaa' Thr Gly Xaa' Cys Thr Xaa' Gly Xaa' Ala Cys Thr Gly Ala Xaa' Cys Thr Gly Xaa' Cys Thr Gly Xaa' Ala Ala Cys Thr Gly Thr Gly Xaa' Gly Xaa' Cys Thr Gly Cys Ala Ala Xaa' Cys Thr Gly Cys Xaa' Thr Gly Cys Cys Thr Xaa' Thr Xaa' Ala Cys Ala Xaa' Ala Cys Xaa' Cys Tyr Ala Ala Cys Thr Tyr Ala Ala Cys Thr Ala Ala Ala Ala Ala Xaa' Tyr Ala Ala Xaa' Ala Cys Cys Cys Ala Ala Ala Xaa 1 Xaa' Ala Ala Xaa' Ala Xaa' Tyr Ala Ala Tyr Ala Ala Tyr Ala Ala Tyr Ala Xaa Xaa Xaa' Xaa, Ala Ala Ala Tyr Tyr Tyr Tyr $\mathrm{T}\mathrm{yr}$ ${
m Tyr}$ TyrTyrAla Ala Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa, Xaa' Xaa' Xaa' Xaa Xaa Xaa' Xaa Xaa' Xaa' Xaa' Cys Cys Cys Cys Cys Cys Xaa Xaa' Xaa' Xaa' Xaa ' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa1 Xaa' Xaa' Xaa 1 Ile Ile Ile Ile Ile Ile Ile Ile Ile Glu Glu Glu GluGlu Glu Glu Glu Glu GluGlu ${\tt Gly}$ GLy \mathtt{Gly} GlyGlyGlyGlyGlyG1yGlyGlyGlyG1yGlyG1yGLYGly $_{\rm Gly}$ GlyGlyGLyGlyCys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr GlyGly GlyGly \mathtt{Gly} ${\tt Gly}$ Gly $_{
m G1y}$ GlyGly GlyGlyGlyGlyGlyG1yGlyPro Pro
(SEQID NO: SEQID NO (SEQID NO: (SEQID NO: SEQID NO SEQID NO SEQID NO: (SEQID NO: SEQID NO. SEQID NO: SEQID NO: SEQID NO: SEQID NO: SEQID NO Cys Cys Xaa' Thr Gly Cys Thr Xaa' Gly Cys Cys cysCys Cys Cys Ala Xaa' Ala Xaa' Cys Thr Gly Cys Cys Xaa' Thr Gly Cys Cys Thr Xaa' Gly Cys Thr Gly Xaa' Cys Thr Gly Cys Xaa' Cys Xaa' Xaa' Cys Cys Xaa' Cys Thr Gly Cys Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys Thr Xaa' Gly Cys Thr Gly Xaa' Cys Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' Tyr Ala Xaa' Xaa' Ala Cys Thr Gly Cys Ala Ala Cys Thr Gly Cys Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Ala Xaa' Ala Cys Thr Gly Tyr Xaa' Ala Ala Cys Thr Gly Thr Gly Xaa' Xaa' Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Thr Gly Cys Xaa' Thr Gly Cys Xaa' Tyr Ala Ala Cys Thr Gly Cys Cys Xaa' Thr Xaa' Xaa' Tyr Ala Ala Cys Thr Gly Cys GLyGlyCys Ala Cys Ala Ala Cys Tyr Xaa' Ala Ala Cys Ala Cys Thr Thr Thr Thr Ala Ala Ala Ala Tyr Ala Xaa' Ala Tyr Ala Xaa' Ala Xaa' Ala Ala Ala Xaa' Ala Ala Ala Xaa' Xaa' Tyr Ala Ala Xaa' Tyr Ala Ala Xaa' Cys Tyr Ala Ala Cys Ala Ala Xaa' Ala Xaa' Ala Ala Ala Ala Ala Ala Ala Ala Tyr Xaa' Xaa' Xaa Xaa ' Xaa' Xaa' Xaa Xaa Xaa' Xaa' Xaa' TyrTyrTyrTyrTyrTyr $\mathrm{T}\mathrm{yr}$ Xaa' Xaa' Xaa' Xaa' Xaa' Xaa ' Xaa' Xaa' Xaa' Xaa' Ala Xaaı Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa, Xaa' Xaa' Cys Xaa' Ala Cys Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa 1 Ile IIe Ile Ile Glu G1uGlu Glu G1yGlyG1yGly G1y $_{\rm Gly}$ GlyGLY ${\tt Gly}$ GlyGLyGIYGLyGly G1yG1yGlyGly ${\tt Gly}$ GlyGlyGly GIyGLYGLyCys Cys Cys Cys Cys Cys Cys CysCys Cys Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr \mathtt{Thr} Thr Thr Thr Gly $_{
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m GLy}$ GlyGly G1yGlyG1y $\text{Gl}\underline{y}$ Gly ${\tt Gly}$ $_{\rm GLy}$ GLYGlyPro Pro
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FIG. 4 (sheet 90 of 114)

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| Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Xaa' Cys Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Xaa' Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Xaa' Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Xaa' Cys Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Xaa' Thr Gly Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Xaa' Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Xaa' Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Xaa' Gly Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Xaa' Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Xaa' Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Xaa' Tyr Ala Ala Cys Thr Gly Cys Xaa' Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Aaa Ala Ala Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Xaa' Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Thr Cys Gly Glu Ile Xaa' Cys Ala Tyr Xaa' Ala Ala Xaa' Xaa' Cys Thr Gly Cys (|
| Pro Gly Pro Gly | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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m Gly}$ ${\tt Gly}$ ${\tt Gly}$ G1yGlyGLyGlyGly ${\tt GLy}$ ${\tt Gly}$ GlyGlyPro Pro
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| Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys Xaa' | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Xaa' Gly Cys | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Xaa' Cys | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys Xaa' | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr | Ile Xaa' Cys Ala Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Xaa' Cys Thr Gly Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Xaa' Thr Gly Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Xaa' Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly C | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Xaa' Thr | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Xaa' Gly | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Xaa' Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys 🤉 | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' Gly Cys | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr | Tyr Ala Ala Xaa' Cys Thr Gly Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Xaa' Cys Thr Gly Cys Xaa' Xaa' | Ile Xaa' Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | FIG. 4 | (Succi 24 of 114) |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | ly Glu | | | Gly Glu | | ly Glu | | | |
| Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | Cys | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Gly Thr | | | | | |
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FIG. 4 (sheet 93 of 114)

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m GLy}$ Xaa' Gly GlyGlyGLy $_{
m G1y}$ Xaa' Xaa' Xaa' G1y $_{
m GLy}$ ${\tt Gly}$ Xaa' Xaa' Xaa' Thr Thr Thr Xaa' Xaa' Xaa' Thr Thr Thr Thr Xaa Xaa 1 Xaa' Xaa' Xaa' Gly . $_{
m GLY}$ GLyG1yXaa' Xaa' Xaa' Xaa' Xaa' Xaa' Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Cys CysCys Cys Cys Cys Cys Cys Cys Cys Cys Cys Ala Tyr Tyr $\mathrm{T}\mathrm{y}\mathrm{x}$ TYrTyr $\mathtt{T}\mathtt{V}\mathtt{r}$ Tyr Tyr TyrTyr Tyr Tyr ${
m Tyr}$ TyrTyrTyrTyrTY rTyrTyrTyrTyrAla Ala Cys Ala Ala Cys Cys Cys Cys Cys Cys Cys Cys Ċys Cys Cys Cys Cys Cys Cys Xaa Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa 1 Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Xaa' Cys Xaa' Ile Glu Glu Glu Glu Glu Glu Glu G]n Glu Glu Glu Glu Gly Gly GlyGly GlyG1yGly GlyGLyGlyGlyGLyG1yGlyG1yGlyGlyG1yGly ${\tt GLy}$ GlyGLY ${\tt Gly}$ Gly ${\tt Gly}$ G1yCys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Thr Thr Gly G1y \mathtt{Gly} Gly $_{
m GLy}$ GLyGLy $_{
m G1y}$ ${\tt GLY}$ GlyGly $_{\rm G1y}$ Gly Gly ${\tt Gly}$ G1yGlyGly $_{
m G1y}$ GLYGlyPro Pro
| <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | <u> </u> | | $\widehat{}$ | <u> </u> | <u> </u> | _ | <u> </u> | <u> </u> | <u> </u> | _ | <u> </u> | | $\widehat{}$ | _ | <u> </u> | <u> </u> | <u> </u> | ~ ^ | _ |
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| Gly Thr Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Xaa' Ala Cys Thr | Gly Thr Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Xaa' Cys Thr | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr Xaa' | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Xaa' Xaa' Ala Tyr Ala Ala Cys Thr | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Xaa' Ala Xaa' Xaa' Tyr Xaa' Ala Ala Cys Thr | Gly Thr Cys Gly Glu Ile Cys Xaa' Ala Xaa' Xaa' Tyr Ala Xaa' Ala Cys Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Xaa' Ala Xaa' Xaa' Tyr Ala Ala Cys Xaa' Thr | Gly Thr Cys Gly Glu Ile Cys Xaa' Ala Xaa' Xaa' Tyr Ala Ala Cys Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Xaa' Ala Xaa' Xaa' Tyr Ala Ala Cys Thr | Cys Thr Gly C | Gly Thr Cys Gly Glu Ile Cys Xaa' Ala Xaa' Tyr Xaa' Xaa' Ala Ala Cys Thr Gly | Gly Thr Cys |

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m Tyr}$ TyrTyr Tyr Tyr $\mathrm{T}\mathrm{yr}$ Tyr ${
m Tyr}$ Xaa' Xaa' Xaa1 Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa, Xaa' Xaa' Xaaı Xaa' Xaa' Xaa' Xaa, Xaa Xaa' Xaa Xaa Ala Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa Xaa' Xaa' Xaa' Xaa' Xaa' Ċys Cys Cys Cys Cys Cys Cys Ile Ile Ile Lle I1eIle Ile Ile Ile Ile Ile $I_{1}^{1}e$ IleIle Ile Ile Glu Glu Glu Glu Glu Glu Glu Glu $_{
m Glu}$ Glu Glu Glu Glu \mathtt{Gly} GlyG1yG1yGLyGly Gly ${\tt GLy}$ Gly \mathtt{Gly} GLYGlyGlyG1y $_{\rm G1y}$ G1yGlyGlyG1yGLY $_{
m G1y}$ Cys Cys Cys Cys Cys Cys Cys Cyscys Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr \mathtt{Thr} Thr Thr \mathtt{Gly} Gly $_{\rm Gly}$ GLyGly \mathtt{Gly} $_{\rm Gly}$ G1y \mathtt{GLy} G1y $_{
m G1y}$ $_{\rm G1y}$ Gly G1yGLyGly \mathtt{Gly} GlyGlyPro Pro
(sheet 96 of 114)

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| Xaa' Xaa' Ala Ala Cys Thr Gly Cys | Xaa' Ala Xaa' Ala Cys Thr Gly | Xaa' Ala Ala Xaa' Cys Thr Gly Cys | Xaa' Ala Ala Cys Xaa' Thr Gly Cys | Xaa' Ala Ala Cys Thr Xaa' Gly Cys | Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Xaa' Ala Ala Cys Thr Gly Cys Xaa' | Ala Xaa' Ala Cys Thr Gly Cys | Ala Xaa' Xaa' Ala Cys Thr Gly Cys | Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Ala Xaa' Ala Cys Thr Gly Xaa' Cys | Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Ala Ala Xaa' Cys Thr Gly Cys | Ala Ala Xaa' Xaa' Cys Thr Gly Cys | Ala Ala Xaa' Cys Xaa' Thr Gly Cys | Ala Ala Xaa' Cys Thr Xaa' Gly Cys | Ala Ala Xaa' Cys Thr Gly Xaa' Cys | Ala Ala Xaa' Cys Thr Gly Cys Xaa' | ' Ala Ala Cys Xaa' Thr Gly Cys | ' Ala Ala Cys Xaa' Xaa' Thr Gly Cys | Gly | ' Ala Ala Cys Xaa' Thr Gly Xaa' Cys | ' Ala Ala Cys Xaa' Thr Gly Cys Xaa' | ' Ala Ala Cys Thr Xaa' Gly Cys | ' Ala Ala Cys Thr Xaa' Xaa' Gly Cys | ' Ala Ala Cys Thr Xaa' Gly Xaa' Cys | ' Ala Ala Cys Thr Xaa' Gly Cys Xaa' | ' Ala Ala Cys Thr Gly Xaa' Cys | ' Ala Ala Cys Thr Gly Xaa' Xaa' Cys | ' Ala Ala Cys Thr Gly Xaa' Cys Xaa' | ' Ala Ala Cys Thr Gly Cys Xaa' | ' Ala Ala Cys Thr Gly Cys Xaa' Xaa' | |
| Ala Tyr Xaa' | a Tyr | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa' | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | Ala Tyr Xaa | |
| Glv Thr Cvs | Ile Cys | Gly Thr Cys Gly | Gly Thr Cys Gly G | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | |

FIG. 4 (sheet 98 of 114)

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m G1y}$ Xaa' Cys Xaa' Thr Gly Xaa' Xaa' Cys Thr Gly Thr Xaa' Gly Xaa' Cys Thr Gly Xaa' Gly Cys Xaa' Cys Xaa' Thr Gly Cys Xaa' Gly Cys Gly Xaa' Cys Cys Xaa' Xaa' Cys Thr Gly Cys Ala Xaa' Cys Thr Gly Cys Cys Thr Gly Cys Thr Xaa' Cys Cys Thr Thr Thr Thr Thr Thr Thr Thr Thr Ala Ala Xaa' Xaa' Xaa' Ala Xaa' Xaa' Cys Xaa' Cys Cys Cys Cys Cys Cys Cys Cys Cys Ala Cys Xaa' Ala Ala Ala Ala Ala Ala Xaa' Ala (Ala Ala Ala Ala Ala Ala Ala Ala Ala Xaa' Ala Xaa' Ala Ala Ala Xaa' Ala Xaa' Xaa Xaa Xaa' Xaa Xaa' Xaa Xaa' Ala Tyr TyrTyrTyrTyrTyx \mathbb{T} yr Tyr $\mathrm{Ty} x$ TyrTyrTyrTyrTyrTyrTyrTyrTyrTyrTyr ${
m Tyr}$ T y xAla Ala Xaa Xaa' Xaa' Xaa' Xaa' Xaa Xaa' Xaa Cys Cys Cys Cys Cys Cys Cys Ile leGlu Glu lu Glu Glu Glu ${\tt Gly}$ GlyGLyGLyGLYGly GLYGly GLYGlyGLYGlyG1yGLY $_{\rm Gly}$ GLYGly ${\tt Gly}$ Gly ${\tt Gly}$ GLyGlyG1yCys Cys CysCys Cys Cys Cys CysCys Thr Thr Thr Thr hr Thr Thr Thr \mathtt{Thr} Thr Thr Thr Thr Gly $_{\rm GLy}$ Gly $_{\rm G1y}$ GLyG1yG1y ${\tt Gly}$ Gly $_{
m G1y}$ GlyGlyGlyG1yGly ${\tt Gly}$ GLYGLyGlyGlyG1yPro Pro
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| Cys Thr Gly Cys Xaa' Xaa' Thr Gly Cys | Thr Xaa' Gly | Xaa' Inr Gly Aaa' Cys Xaa' Ihr Gly Cys Xaa' | Xaa' Gly Cys | Thr Xaa' Kaa' Gly Cys | Xaa' Gly Cys X | Xaa' Cys | Thr Gly Xaa' Xaa' | Thr Gly Xaa' Cys Xaa' Thr Gly Cys Xaa' | $\overline{	ext{Thr}}$ Gly | Thr Gly Cys | | | Xaa' Gly | | Xaa' Thr Gly Cys Xaa' | Thr Xaa' Gly Cys | Thr Xaa' Xaa' Gly Cys | Thr Xaa' Gly Xaa' Cys | Gly | Thr Gly Xaa' Cys | Xaa' | | Thr Gly Cys Xaa' | Thr Gly Cys Xaa' Xaa' | | _ | Xaa' Gly Xaa' | (1 |
| a Tyr Ala Ala Xaa' Xaa' a Tyr Ala Ala Xaa' Cys a Tyr ala Ala Xaa' Cys | Tyr Ala Ala Xaa' | a Tyr Ala Ala Xaa' Cys a Tyr Ala Ala Xaa' Cys | a Tyr Ala Ala Xaa' | Tyr Ala Ala Xaa' | Iyr Ala Tyr Ala | a Tyr Ala Ala Xaa' Cys | Tyr Ala Ala Xaa' | a Tyr Ala Ala Xaa' Cys a Tvr Ala Ala Xaa' Cys | ryr Ala Ala Xaa' | | a Tyr Ala Ala Cys Xaa' | a Tyr Ala Ala Cys Xaa' | Tyr Ala | a Tyr Ala Ala Cys Xaa' | Tyr Ala | a Tyr Ala Ala Cys Xaa' | a Tyr Ala Ala Cys Xaa' | Tyr Ala Ala Cys Thr | Tyr Ala Ala Cys Ill. Tyr Ala Ala Cys Thr | a Tyr Ala Ala Cys Thr | FIG. 4 (sheet 99 of 114) |
| Ile Cys Xaa' Al Ile Cys Xaa' Al | Gly inr Cys Giy Giu ile Cys Ada' Ai Gly Thr Cys Gly Glu Ile Cys Xaa' Al | Gly Thr Cys Gly Glu Ile Cys Xaa' Al Gly Thr Cys Gly Glu Ile Cys Xaa' Al | Gly Thr Cys Gly Glu Ile Cys Xaa' Al | Gly Thr Cys Gly Glu Ile Cys Xaa' Al | GLY Thr Cys GLY GLU Lle Cys Aaa' Al Gly Thr Cys Gly Glu Ile Cys Xaa' Al | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Xaa' | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Xaa' | Gly Thr Cys Gly Glu Ile | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Xaa' | Gly inr cys Gly Glu ile cys | Gly Thr Cys Gly Glu | |

| FIG. 4 | (sheet 100 of 114) |
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| ' Tyr Xaa' Xaa' Ala Ala Cys Thr Gly Xaa' Cys | Xaa' Xaa' Ala Ala Cys Thr | ' Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys | ' Tyr Xaa' Ala Xaa' Xaa' Ala Cys Thr Gly Cys | ' Tyr Xaa' Ala Xaa' Ala Xaa' Cys Thr Gly Cys | ' Tyr Xaa' Ala Xaa' Ala Cys Xaa' Thr Gly Cys | ' Tyr Xaa' Ala Xaa' Ala Cys Thr Xaa' Gly Cys | ' Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Xaa' Cys | ' Tyr Xaa' Ala Xaa' Ala Cys Thr Gly Cys Xaa' | ' Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Cys | ' Tyr Xaa' Ala Ala Xaa' Xaa' Cys Thr Gly Cys | ' Tyr Xaa' Ala Ala Xaa' Cys Xaa' Thr Gly Cys | ' Tyr Xaa' Ala Ala Xaa' Cys Thr Xaa' Gly Cys | ' Tyr Xaa' Ala Ala Xaa' Cys Thr Gly Xaa' Cys | ' Tyr Xaa' Ala Ala Xaa' Cys Thr | ' Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys | ' Tyr Xaa' Ala Ala Cys Xaa' Xaa' Thr | ' Tyr Xaa' Ala Ala Cys Xaa' Thr Xaa' Gly Cys | ' Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Xaa' Cys | ' Tyr Xaa' Ala Ala Cys Xaa' Thr Gly Cys Xaa' | _ | ' Tyr Xaa' Ala Ala Cys Thr Xaa' Kaa' Gly | ' Tyr Xaa' Ala Ala Cys Thr Xaa' | ' Tyr Xaa' Ala Ala Cys Thr Xaa' Gly Cys Xaa' | ' Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Cys | ' Tyr Xaa' Ala Ala Cys Thr Gly Xaa' Xaa' Cys | ' Tyr Xaa' Ala Ala Cys Thr | ' Tyr Xaa' Ala Ala Cys Thr Gly Cys Xaa' | ' Tyr Xaa' Ala Ala Cys Thr | ' Tyr Ala Xaa' Ala Cys Thr Gly Cys | ' Tyr Ala Xaa' Xaa' Ala Cys Thr Gly C | ' Tyr Ala Xaa' Xaa' Xaa' Ala Cys Thr Gly | ' Tyr Ala Xaa' Xaa' Ala Xaa' Cys Thr Gly | ' Tyr Ala Xaa' Xaa' Ala Cys Xaa' Thr Gly Cys |
| Gly Thr Cys | Gly Thr Cys Gly Glu Ile | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Pro Gly Thr Cys Gly Glu Ile Cys Ala Xaa' | Gly Thr Cys | Gly Thr Cys |

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| Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Xaa' Ala Cys Thr Xaa' Gly Cys | Ala Cys Inr Gly Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Xaa' Cys Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Xaa' Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr Xaa' Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Xaa' Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Xaa' Cys Thr Gly Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Xaa' Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Thr Xaa' Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Xaa' Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Xaa' Thr Gly Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Xaa' Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Xaa' Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Xaa' Gly Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Xaa' Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Xaa' Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Xaa' Ala Cys Thr Gly Cys Xaa' Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Xaa' Cys Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Xaa' Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Xaa' Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Xaa' Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Xaa' Cys Thr Gly Cys Xaa' | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Xaa' Xaa' Thr Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Xaa' Thr Xaa' Gly Cys | Gly Glu Ile Cys Ala Xaa' Tyr Ala Ala Xaa' Cys Xaa' Thr Gly Xaa' Cys |
| ${\tt Gl} y$ | Pro Gly Thr Pro Gly Thr | GLy | $^{-}$ | ${\tt Gly}$ | Gly | \mathtt{Gly} | ${\tt Gly}$ | ${\tt Gly}$ | ${\tt Gly}$ | ${\tt Gly}$ | ${\tt Gly}$ | ${\tt Gly}$ | \mathtt{Gly} | ${\tt Gly}$ | \mathtt{Gly} | ${\tt Gly}$ | ${\tt Gly}$ | ${\tt Gly}$ | ${\tt GLy}$ | Gly | ${\tt Gly}$ | $_{ m GLy}$ | ${\tt Gly}$ | ${\tt GLy}$ | ${\tt Gly}$ | \mathtt{Gly} | ${\tt Gly}$ | ${\tt Gly}$ | Gly | ${\tt Gly}$ | \mathtt{Gly} | \mathtt{Gly} |
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| Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys Gly Glu | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Xaa' Cys Thr | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Xaa' Thr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Xaa' Thr | Gly Thr Cys Gly Glu Ile Cys Ala | Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr Xaa' Gly Cys Xaa' | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Xaa' Cys Thr | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Xaa' Thr Gly C | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Xaa' Ala Ala Cys Xaa' Xaa' Thr | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | |

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| (SEQID | Xaa' Cys Xaa' Thr Gly Xaa' | Ala | ಹ | | Ala | _ | | _ | | _ | , Thr |
| (SEQID I | Xaa' Cys Xaa' Thr Xaa' Gly | Ala | | | Ala | | | | | | Thr. |
| (SEQID) | . Xaa' Cys Xaa' Xaa' Thr Gly Cys | Ala | Ala Aaa' Ala Xaa' | LYE A Tyr A | ALa Ala | Cys | ILE | Glu Glu | GLY Gly | | Thr |
| (SEQID I | Xaa' Xaa' Cys Thr Gly | Ala | | | Ala | | | | | _ | Thr |
| (SEQID I | Xaa' Xaa' Cys Thr | Ala | Ala Xaa' | Tyr A | Ala | Cys | . Ile | . Glu | | . Cys | ' Thr |
| (SEQID I | . Xaa' Xaa' Cys Thr Xaa' Gly Cys | Ala | Ala Xaa' | Tyr A | Ala | Cys | Ile | .GIn | ${	t Gly}$ | . Cys | . Thr |
| (SEQID I | . Xaa' Xaa' Cys Xaa' Thr Gly Cys | Ala | Ala Xaa' | Tyr A | Ala | Cys | Ile | . GIu | Gly | | Thr |
| (SEQID I | Xaa' Xaa' | Ala | Ala Xaa' | Tyr A | Ala | | Ile | . GJu | Gly | | Thr |
| (SEQID I | Xaa' Xaa' Cys Thr Gly Cys | Ala | Ala Xaa' | Tyr A | Ala | Cys | Ile | Glu | | | Thr |
| (SEQID I | Xaa' Cys Thr Gly (| Ala | Ala Xaa' | | Ala | - | Ile | .GIu | | | Thr |
| (SEQID I | ' Ala Cys Thr | Xaa | Ala Xaa' | | Ala | _ | Ile | | | | . Thr |
| (SEQID I | ' Ala Cys Thr | Хаа | Ala Xaa' | | Ala | | Ile | Glu | | | . Thr |
| (SEQID I | ' Ala Cys Thr | Xaa | Ala Xaa' | | Ala | | Ile | Glu | | | Thr |
| (SEQID I | ' Ala Cys Thr Gly Xaa' | Xaa | | | | | | | | | Thr |
| (SEQID I | Ala Cys Thr Gly Xaa' Cys | Xaa | | | | CVS | | | | | 1. Thr |
| (SEQID I | Ala Cys Thr Xaa' Gly Cys X | Хаа | | | | CVS | | | | | Thr |
| (SEQID I | Ala Cvs Thr Xaa' Gly Xaa' | Xaa | | | | | - | | | | Thy. |
| (SEQID I | ' Ala Cys Thr Xaa' Xaa' | Xaa | | | | | | | | | Thr |
| (SEQID I | ' Ala Cys Thr Xaa' Gly Cys | Xaa | | | | - | ΙΉ | | | | Thr |
| (SEQID I | Ala Cys Xaa' Thr Gly Cys X | Xaa | | TVE A | | CVS | | | | CVS | Thr |
| (SEOID) | The Car Year Thr Glv Xee! | , c | | | ן קין ר | ָרָלָ מַלָּלָ | 4 1- | | | | 1111 1111 11111 |
| (SEQID I | Ala Cvs Xaa' Thr Xaa' Gly | Xaa | | TVY A | מות מות | ל ל ל מ | | | לַדָּאַ לַבָּוֹ | ני אַ רַ מי אַ | Thr. |
| | Ala Cys Xaa' Thr Gly Cys | Xaa | Ala Xaa' | | Ala | Cys | II F | Glu | | _ | Thr |
| (SEQID I | ' Ala Xaa' Cys Thr | Хаа | Ala Xaa' | Iyr A | Ala ' | Cys | Ile | Glu | \mathtt{Gly} | Cys | Thr |
| (SEQID) | ' Ala Xaa' Cys Thr Gly Xaa' Cys | Хаа | la Xaa' | ryr Al | Ala | Cys | Ile | Glu | $G1\overline{y}$ | | Thr |
| (SEQID I | ' Ala Xaa' Cys Thr Xaa' Gly | Xaa | Ala Xaa' | | Ala ' | Cys | Ile | Glu | | | Thr |
| (SEQID I | Ala Xaa' Cys Xaa' Thr Gly | Xaa | Ala Xaa | | | Cys | | | | | Thr |
| (SEQID I | ' Ala Xaa' Xaa' Cys Thr Gly Cys | Xaa | Ala Xaa' | | Ala | Cys | Ile | Glu | | | Thr |
| (SEQID) | ' Ala Xaa' Cys Thr Gly | Xaa | Ala Xaa' | | Ala | Cys | Ile | | | | Thr |
| (SEQID ! | ' Xaa' Ala | Хаа | Ala Xaa' | | Ala ' | Cys | Ile | | | | Thr |
| (SEQID 1 | ' Xaa' Ala Cys Thr Gly Xaa' | Xaa | ਰ | | Ala ' | Cys | | | | Cys | Thr |
| (SEQID N | ' Xaa' Ala Cys Thr Xaa' Gly Cys | Xaa | la Xaa' | Ivr Al | Ala | CVS | Ile | Glu | G1v | CVS | Thr |

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| r Ala Xaa' Ala Xaa' Cvs Xaa' Thr Glv Cvs Xaa' (SEOID NO: | Ala Xaa' Ala Xaa' Cys Thr Xaa' Gly Cys (SEQID | r Ala Xaa' Ala Xaa' Cys Thr Xaa' Xaa' Gly Cys (SEQID NO: | r Ala Xaa' Ala Xaa' Cys Thr Xaa' Gly Xaa' Cys (SEQID NO: | r Ala Xaa' Ala Xaa' Cys Thr Xaa' Gly Cys Xaa' (SEQID NO: | r Ala Xaa' Ala Xaa' Cys Thr Gly Xaa' Cys (SEQID NO:) | r Ala Xaa' Ala Xaa' Cys Thr Gly Xaa' Xaa' Cys (SEQID NO: | r Ala Xaa' Ala Xaa' Cys Thr Gly Xaa' Cys Xaa' (SEQID NO: | Ala Xaa' Ala Xaa' Cys Thr Gly Cys Xaa' | Ala Xaa' Ala Xaa' Cys Thr Gly Cys Xaa' (| Ala Xaa' Ala Cys Xaa' Thr Gly Cys | Ala Xaa' Ala Cys Xaa' Xaa' Thr Gly Cys | Ala Xaa' Ala Cys Xaa' Xaa' Thr Gly Cys (| r Ala Xaa' Ala Cys Xaa' Xaa' Thr Xaa' Gly Cys (SEQID NO: | Ala Xaa' Ala Cys Xaa' Xaa' Thr Gly Xaa' Cys | Ala Xaa' Ala Cys Xaa' Xaa' Thr Gly Cys Xaa' (| Ala Xaa' Ala Cys Xaa' Thr Xaa' Gly Cys | Ala Xaa' Ala Cys Xaa' Thr Xaa' Xaa' Gly Cys | Ala Xaa' Ala Cys Xaa' Thr Xaa' Gly Xaa' Cys | Ala Xaa' Ala Cys Xaa' Thr Xaa' Gly Cys Xaa' (| Ala Xaa' Ala Cys Xaa' Thr Gly Xaa' Cys | r Ala Xaa' Ala Cys Xaa' Thr Gly Xaa' Xaa' Cys (SEQID NO: | Ala Xaa' Ala Cys Xaa' Thr Gly Xaa' Cys Xaa' | Ala Xaa' Ala Cys Xaa' Thr Gly Cys Xaa' | r Ala Xaa' Ala Cys Xaa' Thr Gly Cys Xaa' Xaa' (SEQID NO: | Ala Xaa' Ala Cys Thr Xaa' Gly Cys | Ala Xaa' Ala Cys Thr Xaa' Xaa' Gly Cys | Ala Xaa' Ala Cys Thr Xaa' Xaa' Gly Cys (SEQID | Ala Xaa' Ala Cys Thr Xaa' Xaa' Gly Xaa' Cys | rr Ala Xaa' Ala Cys Thr Xaa' Xaa' Gly Cys Xaa' (SEQID NO: | Ala Xaa' Ala Cys Thr Xaa' Gly Xaa' Cys (SEQID | Ala Xaa' Ala Cys Thr Xaa' Gly Xaa' Xaa' Cys | rr Ala Xaa' Ala Cys Thr Xaa' Gly Xaa' Cys Xaa' (SEQID NO: | r Ala Xaa' Ala Cys Thr Xaa' Gly Cys Xaa' (SEQID NO:) | FIG. 4 | (sheet 110 of 114) |
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| GIV Thr CVS GIV GIN TIP CVS Ala TVr Al | Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Al | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr | | |

FIG. 4 (sheet 112 of 114)

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| (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | | (SEQID NO: | (SEQID NO: | (SEQID NO: | | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | | (SEQID NO: |
| Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Xaa' Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Xaa' Cys Thr | Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Gly Cys | Gly Thr Cys |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ~ ^ | ~ | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | ~ | <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
|---|---|---|---|-----------------|---|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------------------|-----------------|--|-----------------|--|-----------------|-----------------|-----------------|-----------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|--|
| (SEQID NO: | SEQID NO: | (SEQID NO: | | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | (SEQID NO: | |
| Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Xaa' Thr Gly Cys Pro Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Xaa' Xaa' Thr Gly Cys | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Xaa' Thr Xaa' Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Xaa' Xaa' Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Xaa' Thr Xaa' | Gly Thr Cys Gly Glu Ile Cys Ala | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Xaa' | Gly Thr Cys Gly | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr Xaa' Xaa' Gly Cys 🥅 | Gly Thr Cys Gly Glu Ile Cys Ala Tyr Ala Ala Cys Xaa' Thr | Gly Thr Cys Gly | Gly Thr Cys | |

F1G. 4 (sheet 113 of 114)

| ONO: | O NO: |) NO: | ON O: | ON O: | ON O: | O NO: | ONO: |) NO: | ON 0: | ONO: | ONO: | O NO: |) NO: | O NO: |) NO: | O NO: | O NO: | O NO: |) NO: | ON O: | ONO: | ONO: | ON O: | ON O: | ON O: |) NO: | ON O: | ON O: | ONO: | ONO: |) NO: | O NO: |
|-------------------------------|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------|---------------------|--------------------------|-----------------|--------------------------|-------------------------------|----------------------|-------------------------------|-------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------------|-------------------------------|
| (SEQID | (SEQID | Cys (SEQID | Cys (SEQID | a' (SEQID | (SEQID | Cys (SEQID | a' (SEQID | (SEQID | a' (SEQID | (SEQID | (SEQID | Cys (SEQID | a' (SEQID | (SEQID | a' (SEQID | (SEQID | (SEQID | a' (SEQID | (SEQID | (SEQID | (SEQID | Cys (SEQID | _ | (SEQID | _ _ | (SEQID | (SEQID | a' (SEQID | (SEQID | (SEQID | (SEQID | a' (SEQID |
| a' Xaa' Gly Cys | a' Xaa' Xaa' Gly Cys | ' Xaa' Xaa' Gly | ' Xaa' Xaa' Gly Xaa' | a' Xaa' Xaa' Gly Cys Xaa | ' Xaa' | ' Xaa' Gly Xaa' Xaa' | ' Xaa' Gly Xaa' Cys X | a' Xaa' Gly Cys Xaa' | a' Xaa' Gly Cys Xaa' Xaa | a' Gly Xaa' Cys | a' Gly Xaa' Xaa' Cys | 'Gly Xaa' Xaa' Xaa' | a' Gly Xaa' Xaa' Cys Xaa | _ | a' Gly Xaa' Cys Xaa' Xaa | _ | a' Gly Cys Xaa' Xaa' | a' Gly Cys Xaa' Xaa' Xaa | y Xaa' Cys | y Xaa' Xaa' Cys | y Xaa' Xaa' Cys | Xaa' Xaa' Xaa' | y Xaa' Xaa' Xaa' Cys Xaa | y Xaa' Xaa' Cys Xaa' | y Xaa' Xaa' Cys Xaa' Xa | y Xaa' Cys Xaa' | y Xaa' Cys Xaa' Xaa' | y Xaa' Cys Xaa' Xaa' Xaa | y Cys Xaa' | y Cys Xaa' Xaa' | y Cys Xaa' Xaa' | y Cys Xaa' Xaa' Xaa' Xaa |
| s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Xaa | Ala | Ala | Ala | Ala | Ala | s Ala Tyr Ala Ala Cys Thr Xaa | Ala | s Ala Tyr Ala Ala Cys Thr Xaa | s Ala Tyr Ala Ala Cys Thr Gly | Ala | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | Ala Tyr Ala Ala Cys Thr | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly | s Ala Tyr Ala Ala Cys Thr Gly |
| Gly Thr Cys Gly | Pro Gly Thr Cys Gly Glu Ile Cys | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly Glu | Gly Thr Cys Gly | Gly Thr Cys Gly Glu | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly Glu | ${	t Gly \ Thr \ Cys \ Gly}$ | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | Gly Thr Cys Gly | ${ m Gl} y$ Thr Cys ${ m Gl} y$ | Gly Thr Cys Gly |

FIG. 4 (sheet 114 of 114)

| 134/134 | | 1 | 3 | 4 | 1 | 3 | 4 |
|---------|--|---|---|---|---|---|---|
|---------|--|---|---|---|---|---|---|

| PGTCEICAYAACTGC (human) (SEQ ID NO:) | PGTCAEICAYAACTGC (SEQ ID NO: | |
|---------------------------------------|---------------------------------|--|
| PGTCEICASAACTGC (SEQ ID NO: | PGTCEAICAYAACTGC (SEQ ID NO: | |
| PGTCEICATAACTGC (SEQ ID NO: | PGTCELACAYAACTGC (SEQ ID NO: | |
| PGTCEICANAACTGC (SEQ ID NO: | PGTCEICAAYAACTGC (SEQ ID NO: | |
| PGTCEICAQAACTGC (SEQ ID NO: | PGTCEICAYAAACTGC (SEQ ID NO: | |
| PGTCEICARAACTGC (SEQ ID NO: | PGTCEICAYAACATGC (SEQ ID NO: | |
| PGTCEICAEAACTGC (SEQ ID NO: | PGTCEICAYAACTAGC (SEQ ID NO: | |
| PGTCEICADAACTGC (SEQ ID NO: | PGTCEICAYAACTGAC (SEQ ID NO: | |
| PGTCEICAGAACTGC (SEQ ID NO: | PGTCAEICAAYAACTGC (SEQ ID NO:) | |
| PGTCEICAAAACTGC (SEQ ID NO: | PGTCEAICAAYAACTGC (SEQ ID NO:) | |
| PGICEICAMAACIGC (SEQ ID NO: | PGTCEIACAAYAACTGC (SEQ ID NO:) | |
| PGTCEICAIAACTGC (SEQ ID NO: | SHTCEICAFAACAGC (SEQ ID NO: | |
| PGTCEICALAACTGC (SEQ ID NO: | STCEICAYAACAGC (SEQ ID NO: | |
| PGTCEICAVAACTGC (SEQ ID NO: | PNTCEICAYAACTGC (SEQ ID NO: | |
| PGTCEICAHAACTGC (SEQ ID NO: | PDPCEICANAACTGCL (SEQ ID NO: | |
| PGTCEGICAYAACTGC (SEQ ID NO: | YDECEICMFAACTGC) (SEQ ID NO: | |
| PGTCEIGCAYAACTGC (SEQ ID NO: | VCEICAFAACTGC (SEQ ID NO: | |
| PGTCEICGAYAACTGC (SEQ ID NO: | PDVCDVCAFAACSGC (SEQ ID NO: | |
| PGTCEICAGYAACTGC (SEQ ID NO: | LDLCEICAFAACTGC (SEQ ID NO: | |
| PGTCEICAYGAACTGC (SEQ ID NO: | VDVCEICAFAACTGC (SEQ ID NO: | |
| PGTCEICAYAGACTGC (SEQ ID NO: | LDICEICAFAACTGC ((SEQ ID NO) | |
| PGTCEICAYAAGCTGC (SEQ ID NO: | | |
| PGTCEICAYAACGTGC (SEQ ID NO: | | |
| PGTCEICAYAACTGGC (SEQ ID NO: | | |